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This document includes the papers presented at an inservice training institute for planners from State education agencies. Guidelines concerning information analysis techniques and basic pupil, personnel, and fiscal information needs are covered in papers by Stanley Hecker, John J. Stiglmeier, Paul Bethke, Robert L. Hopper, and Burton D. Friedman. Outside sociocultural and political influences affecting the planning process are described in papers by Donald Leu and Merlin G. Duncan. Suggestions for planning quality rural education are included in papers by Arnold Gallegos and Vito Perrone. Papers delivered by Paul G. Orr and Gerard H. Gaynor describe the preparation and function of local planners and the planning role of the educational manager. Existing comprehensive statewide planning programs in Texas and North Dakota are described in papers by Charles Nix and Kent G. Alm. The effect of changing Federal-State relationships on educational planning is the topic of a paper by Harry Phillips. (JH)

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NDEA Insitute for In-Service Training of Educational Planners for State Departments of Education

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on Educational Planning

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DEVELOPMENT OF THE INSTITUTE

Hal E. Hagen, Director, Institute for State Educational Planners
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Dr. Hal E. Hagen has been involved in higher education since 1949, when he began teaching political science at Colorado College. At the present time he is Chairman of the Department of Secondary Education and Foundations of Education at Mankato State College and is currently serving as Director of the Institute for State Educational Planners. Dr. Hagen received his doctor's degree from the University of Wyoming in 1954 where he was administrative assistant to the Dean of the College of Education. Since that time Dr. Hagen has served as a college professor, college dean, and educational consultant particularly in the areas of junior college, planning and school surveys.

Probably the most neglected area in education today is that of planning, particularly long-range planning or "future-planning." The increasing rate of change evidenced in our society has served to emphasize the need to plan for educational change. In the past much of what passed for educational planning was the activity which occurred "from crisis to crisis."

It appears that many people expect educational planning to spring into being as in incidental by-product of determining educational objectives. These people tend to forget that setting educational goals is also a planning operation.

The history of our state education agencies has not been one of educational leadership. In the past the functions assigned to this activity have largely been those of information collection and dissemination, apportionment of state aid, and some regulation in order to insure a degree of uniformity of school district operation. It has only been in the past few years that state departments of education have been looked to for educational leadership.

As the people of the states have turned to the state for educational leadership, it has become more and more apparent that planning is vital to being able to carry out a leadership role. This has created problems within many of the state education agencies with respect to organizing for planning. Jack Culbertson pointed this out when he stated:[1]

> *If educational planning is to flourish at the state level and if it is to serve educational institutions effectively, organizations will need to be adapted or created which will provide a setting to which competent planners will be attracted and in which they can function effectively.*

Until recently, little attention has been given to discovering where our educational efforts are being directed and to the evaluation of results. Although this is easily apparent at the local level where most decisions seem to be made on a day-to-day or quarter-to-quarter basis, it is even more disturbing at the state level where little attention seems to be paid to setting up a long-range program to chart educational courses for the state. Too often it appears that the educational planning which is conducted provides little more than hindsight remedies for today's problems.

Until two years ago, few of the state education agencies even provided for a top-level administrator who was assigned primary duties as the planner for his state. A review of past practices indicates that the usual procedure for most states was to hire an outside group of consultants to make periodic surveys of the educational problems of the state and to make recommendations which might, or might not, be acceptable even to the agency which requested the study. Even when they were acceptable, there was no one who had responsibility for seeing that the necessary planning continued to be done to keep things moving toward the desired end.

It appears necessary that, in every state, the state education agency must be prepared to provide leadership in planning and effecting needed changes in education, including cooperation with other agencies, organizations, and frequently other states in the process. The state agency should move toward the development of state-wide plans, including alternatives, for pertinent aspects of education. The need for educational planning, which has at times been considered something of an academic will-of-the-wisp is becoming more and more apparent. In a recent paper, Dr. Carpenter was very emphatic about the need for planning stating that: "No modern educational institution of any important social significance can afford to operate without an effective and efficient planning and development task force."[2]

Despite the growing need for planning at the state education agency level, as well as at all levels, it becomes immediately apparent that there is a lack of trained personnel for planning. There is no pool of personnel waiting to staff planning positions in the state departments of education. Consequently, the best immediate course seems to be one of selecting someone already employed in the agency, who is acquainted with the operation of the department, and who has demonstrated organization and administrative ability, as the planner.

If this pattern is accepted, as it has been in a large number of the states, the problem of in-service training arises. In considering various possibilities for such training, it becomes immediately apparent that there is little history or tradition from which to borrow. It is also clear that what is needed is to structure a new type of program for training vitally needed personnel.

An interdisciplinary approach seemed to afford the greatest flexibility for development of needed skills, particularly if it made use of systems analysis techniques coupled with a problem solving approach. Since the "planners" employed by the SEA's would be at different levels of sophistication with respect to experience and skill, it was obvious that the program would involve a considerable amount of individualization.

Generally, it is always possible to borrow the conceptual apparatus of other disciplines and apply them analogically to the data of a different field. For educational planning there are many areas that can make a contribution, however, there are few specifics from which we can borrow for training planners. It is also obvious that college and university professors are mostly talking about the overall need for planning, but are not providing much assistance in tailoring the specific type of program needed.

One area we can explore is that of the basic outline of a conceptual structure based upon the adoption and specific adaptation of systems analysis for understanding the task of educational decision making. In the process, as must be the case with any real effort to building on central concepts borrowed from other areas and viewpoints, educational planning in systems terms may take on a number of new dimensions and older concepts may acquire new and virtually unrecognizable content. A caution was expressed by Robert Howsam when he wrote:[3]

> *Unless we are careful, present emphasis may produce an educational system that pursues the SCIENTIFIC MANAGEMENT tradition and leads education to the same consequences as earlier befell industry and business. In retrospect, it is now known that Frederick Taylor wasn't wrong in developing technology and management; he just wasn't right enough. His science didn't extend into the human realm. In my view we in education may be headed toward repeating errors against which history has given ample warning.*

Recognizing the need, and yet cognizant of the problems of designing a new type of program, the Institute for State Education Agency Planners was organized at Mankato State College. The objectives were determined and a general curricular pattern was designed to meet the goals. A request was made for funding and the U.S. Office of Education funded the program on June 10, 1968.

It is hoped that, as the program is carried out, the objectives listed below and the general areas of the curriculum will serve to meet the need for which the Institute was established. The procedure for conducting the Institute includes general conferences with all participating states, regional conferences, and individual visits to participating state agencies. Even as planning must consider alternatives and continually review progress for change, so the program of the Institute will be studied and modified as it appears desirable in order to meet the needs of the participants.

The primary purpose of the Institute is to provide the training appropriate to developing the ability to design, organize, and direct a permanent planning and evaluation component in state education agencies.

The general goals of the Institute are:

1. To develop an awareness and appreciation of the role of program planning as a necessary component of the educational system.
2. To assist the participants in acquiring information needed in order to design, organize, and direct a program planning and evaluation component.
3. To provide opportunities through which participants may acquire a capability—the motivation and essential knowledge—necessary to plan an adequate information system and to initiate the use of high quality management information handling procedures.
4. To develop an appreciation of the need for and use of a management information system as an essential factor in program planning and evaluation.
5. To develop, through an organized system of in-service training, an awareness of and some skill in the use of various communication skills as a part of planning.
6. To give practical information concerning the need for and ways of organizing a budget planning system.
7. To develop the guidelines for the preparation of a forward funding plan for combining the state education agencies' requests for funds into a single educational proposal which can be examined in the light of the state's educational goals.
8. To provide experience through modeling and simulation exercises for assisting planners in developing skills in strategy planning.
9. To assist the participants in gaining an awareness and understanding of the political, social, economic, and legal contexts within which planning must be conducted.
10. To develop techniques for undertaking a program for developing ways and means of effectively evaluating the success of planning and the use of evaluation in recycling planning.

In light of the objectives the Institute is designed to assist the participants on-the-job. Such practical assistance will be accomplished both by the development of simulated problems selected to develop techniques and skills for program planning, and working with actual on-the-job problems. The experiences provided will be organized in a spiral sequence so that each year the participant will be studying, evaluating, and working out problems in greater depth.

The six basic areas under which the curriculum is organized are:

1. Design and organization of a program planning and evaluation component in a state agency.
2. Skills development, including developing a Management Information System; Planning Programming Budgeting System; and Modeling and Simulation.

3. Strategy planning: systems analysis, techniques of design and synthesis, and work flow.
4. Political, economic, and social factors involved in developing and implementing plans.
5. Development of "forward funding" plans.
6. Development of evaluation capacity.

We feel that the Institute affords us an opportunity to assist in making a contribution to the development of leadership role of the State Education Agencies. It is predicated on the grounds that educational change is best approached by a carefully planned, calculated and systematic procedure. Unplanned and undirected change cannot be tolerated in the light of present educational needs.

References:

1. Jack Culbertson, "State Planning for Education," *Planning and Effecting Needed Changes in Education.* p. 280.

2. C. R. Carpenter, "On Planning Developments in Education," *Planning for Effective Utilization of Technology in Education.* p. 23.

3. Robert R. Howsam, "Effecting Needed Changes in Education," *Planning and Effecting Needed Changes in Education.* p. 67.

THE PUPIL ACCOUNTING COMPONENT IN STATE PLANNING

Stanley Hecker, Professor of Education
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Dr. Stanley E. Hecker, Jr. served as superintendent of a public school system in Kentucky and also worked for the Kentucky State Department of Education. He was a research specialist in education at the University of Kentucky prior to coming to Michigan State University in 1956. He is currently a professor of educational administration and higher learning. In 1959, he wrote "Your Michigan School Costs," and in 1960-1961 he was granted a one-year leave of absence to serve as director of research for the Michigan Education Association. Dr. Hecker is a nationally known consultant in Financial Affairs as they relate to State Education Agency Programs.

At the outset let it be understood that when at the invitation of Dr. Duncan, I accepted this assignment I had no intention (nor time) to rediscover America. I have strong feelings concerning the essential need for the collection and use of accurate, up-to-date data concerning pupils, but the technical aspects of definition, methods of data collection, etc. I believe are readily available. For those few in the audience who are not familiar with the specific publication, I would like to refer them to Handbook V, *Pupil Accounting for Local and State School Systems.* This 1964 Bulletin of the U.S. Office of Education, Department of Health, Education and Welfare is one of the handbook series dealing with financial, property, staff and pupil accounting published in the past decade by the office. Reading the foreword of the handbook on *Pupil Accounting* is impressive in terms of the conferences held (two national and eight regional conferences) and organizational involvement (ten cooperating national organizations including Chief State School Officers, Personnel and Guidance Association, School Administrators, School Business Officials and School Boards Association officially approved the *Handbook.*)

It is my opinion that for the improvement of the quality of education the use of standardized terminology is essential. It is only with a bank of basic clientle information that realistic planning can be carried out efficiently and effectively. As the expenditures for education continue to rise and the public demands an accounting not only of the quantity but also of the quality of the educational product, it is imperative that we have the data readily available for both evaluation and planning. And in the educational enterprise what data is more basic and necessary than pupil data? Facilities, personnel, finance exist only to serve pupils.

What information should be collected and maintained on a comparable basis by local school districts for use by the local unit and for state and national planning? The OE *Handbook* used three basic criteria as guides in the selection of pupil information items to be collected. According to these criteria "each item produces information that, (1) is important to and needed by local school systems, (2) is needed for the exchange of information about pupils who transfer for comparisons of information about pupils, and (3) can be maintained as a record with reasonable effort." The Handbook further states:

> *Standardized information is valuable to school officials in policy determination, in educational planning, and in reporting to the public about the condition and progress of education. Such information should (1) result in improved guidance, counseling, scheduling, teaching, and learning by*

individual pupils; (2) facilitate the making of decisions about curriculum development and change; (3) facilitate the estimating of future enrollments and future needs of individual schools and school systems; (4) aid in the comparison of information among communities and among States; (5) improve the accuracy and timeliness of nationwide summaries of information about pupils; and (6) improve the quality and significance of educational research.

Within a local or state school system, standardized items of information recorded on manual forms are readily compared and combined with the same standardized items of information processed by automatic data-processing systems. Further, the use of standardized items of information is essential to the orderly and efficient conversion. The adoption of standard classifications and terminology is a necessary first step, whether a school system plans to initiate or to extend automatic data processing for an individual school or for the entire school system.

To accomplish the purpose of "standard classifications and terminology" the Handbook devotes several chapters to the classification and definition of items of information about pupils. The classification system suggests the following:

1000 Series	Personal Identification Information
2000 Series	Family and Residence Information
3000 Series	Physical Health Information
4000 Series	Standardized Tests Information
5000 Series	Enrollment Information
6000 Series	Performance Information
7000 Series	Transportation Information
8000 Series	Tuition and Special Assistance Information

State leadership is essential to the development and implementation of any reasonable pupil accounting program. The unique position of State Education Agencies puts primary responsibility upon each department. A careful analysis of the existing program is of first priority—existing forms, manuals and regulations may need revision—new materials might need to be developed for local, regional and statewide consideration. The Agency should guide and train local school system personnel by means of conferences, written materials and direct assistance.

The following direct quotation from the *Handbook* sets forth the suggested principles and procedures for planning and implementing a system of information about pupils:

> *The first step in the improvement of a system of pupil information at both the state and local levels is to place administrative responsibility in the hands of a single person. This person should be cognizant of legal and educational as well as technical aspects of pupil accounting. His work will be greatly facilitated if he has the active support of top administrators for the required changes in the information system and enough competent staff members to plan, supervise, and operate the system. Under his direction, the staff should—*
>
> *1. Determine the objectives of the system in the light of the uses to which the information will be put.*
>
> *2. Plan for the entire system carefully, including all procedures for collecting, processing, interpreting, and disseminating data. The plan should be put into writing.*
>
> *3. Select items that meet informational needs and that suppliers are capable of furnishing. Items which will be combined from several sources should be stated in standard terms and should be codable for automatic data processing.*
>
> *4. Develop forms for collecting information. These should be easy to under-*

stand, easy to fill in, easy to process. The number of forms should be kept to a minimum by limiting the number of duplicating or overlapping requests and by designing forms so that they can be used for more than one purpose.

5. Gain the cooperation of all concerned; try to dispel any fears or reservations.

6. Ensure the accuracy of information at the source by impressing local employees with their responsibility for accurate information and instructing them in the techniques of accurately collecting and processing information.

7. Make the transfer from the old to the new system in a deliberate and careful manner.

8. After the new system has been installed, keep records up-to-date at all times.

9. Encourage all who have a stake in the system-suppliers, collectors, processors, and users of pupil information—to evaluate continuously its effectiveness and efficiency.

THE PERSONNEL ACCOUNTING COMPENENT IN STATE PLANNING

John J. Stiglmeier, Director of the Information Center on Education
New York Department of Education, Albany, New York

Dr. John J. Stiglmeier is currently responsible for the coordination and operation of data collection procedures within the New York State Education Department. He also is in charge of the development and implementation of educational information systems at all levels of education, public and private. Most recently, the Information Center implemented a fully operational basic educational data system for public elementary and secondary schools in New York. Dr. Stiglmeier, who was awarded his doctors degree from Fordham University, has been a teacher and reading consultant in the public schools of New York, a research assistant at Fordham and the Albany public schools, and chief of the Bureau of Statistical Services in the New York State Department of Education.

There is an increasing recognition that education plays a major role in the achievement of local, state, and national objectives. We now have a greater awareness of the strong relationship that exists between education and such factors as economic growth, poverty, foreign affairs and, not the least of all, domestic tranquility.

At a time when national attention is focused on the importance of education and an increasing proportion of local, state and national budgets are directed toward support of our schools we must improve the accuracy, timeliness and reliability of the information upon which educational decisions are based. Planning for education cannot be done in a vacuum. It is just not defensible to make such far reaching decisions on the basis of inadequate and outdated information.

Modern technology has made available the tools for a sweeping assault on information problems, making possible the application of a true systems approach to the collection, processing, analysis and dissemination of educational information. With a not unreasonable investment of money and effort we can develop educational data systems which will improve the quality of educational decisions and ultimately provide better education for young people. Educators bear primary responsibility for taking the necessary action to achieve these ends.

In any educational agency—local school district, regional administrative unit, state or national education agency—perhaps the most crucial condition for the establishment of a streamlined information system is a belief on the part of upper echelon executives that such a system is both desirable and feasible. For an information system to be born and survive its infancy the top people in the agency must have a strong commitment to it. Educational leaders have an obligation to learn about information systems, not as technicians but as potential users.

A second precondition for the successful establishment of an information system at the state level requires that a central body within the state education agency be given responsibility and authority for coordinating all information handling. The central body may be a committee made up of executive level representatives of all operating units in the agency or a separately organized administrative unit. In either instance, adequate staffing must be provided to assure competent leadership, continuity in development, and efficiency in operation. The establishment of such an information services unit will help assure equality of service, prevent duplication of effort and dissemination, and eliminate data collection that is unnecessary, undesirable, infeasible and redundant. In addition, it will provide an authoritative source of educational information for legislative and executive action and decision-making.

The New York State Education Department, in recognition of the information problems which have characterized the field of education, has created such a centralized agency called the Information Center on Education (ICE).

The Information Center on Education is charged with the responsibility for the identification, implementation and operation of data systems in all areas of education as well as the coordination of all data collection procedures within the Education Department. The Center works with those individuals in the Department charged with planning responsibilities to ensure that needed information is readily available in the form required. In addition, assistance is provided in the definition of research and evaluation activities, as well as program size and effectiveness indicators, directed toward the planning function.

The crucial nature of having adequate personnel data at the state level is apparent. The impact of staff on the quality educational programs as well as the heavy financial investment in school personnel require a state education agency to be intensely concerned in this area.

At the state level, planners generally need "big picture" information. Accordingly, the personnel component of a management information system should, for planning purposes, provide a broad overview of the present situation with respect to school personnel as well as portray long term trends. Such information will quickly reveal areas in need of special attention. For example, specific subject areas within which the proportion of unqualified (uncertified) persons is increasing at an alarming rate can be observed; or the presence of inordinate salary discrepencies among positions within education or between education and other professions can be uncovered.

While the personnel component of a management information system at the state level should focus on aggregate data, it should also have the capability of getting detailed information about a particular aspect of the personnel situation when the "big picture" reveals a special problem. In addition, the system should be so designed that it serves not only the planning function but day to day program operations as well.

In New York State, the maintenance of unit record data on school personnel provides a vehicle through which information on pupils and curricula is also obtained. At hand, is the capability of producing broad summaries plus a sampling base on which indepth studies can be made.

Too often in the planning function, those areas most in need of a concerted planning effort are the very areas in which virtually no information is available either because they are newly emerging problem areas or because they just have not received prior attention. Even where information has been available in a state education agency, all too often it has been virtually impossible, or impractical, to aggregate the data in meaningful form within required time limits. It is imperative, therefore, that an information system have the capability of responding quickly when a need for information becomes apparent.

A wealth of materials are available relative to the techniques of planning, utilizing cost-effectiveness or cost-benefit analysis, PPBS and the like. Several state agencies across the country have developed, to a greater or lesser degree, information systems which provide solid data for planning purposes. But in the long run, each state education agency must define its own data requirements and be its own source of planning information.

Each state can exert true leadership only if decisions concerning the educational community are valid; such validity must rest, in a large degree, on the timeliness, reliability and validity of the data on which the decisions are based.

THE FISCAL ACCOUNTING COMPONENT IN STATE PLANNING

Paul Bethke, Consultant in School Finance
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Dr. Paul Bethke joined the Colorado State Department of Education in 1959 after 22 years of experience as a teacher and superintendent of schools in Colorado. A member of the Program Budgeting Committee of the Association of School Business Officials, Dr. Bethke has participated in the U.S. Office of Education conference concerning Development of a Revised School Financial Accounting System and has also been a participant at the UCLA-sponsored National Conference on Program Accounting. He is also chairman of the Finance Subsystem Committee of the Midwest States Educational Information Project. Dr. Bethke received his doctors degree in school administration from Denver University.

Accounting has been defined as the art of recording, classifying, and summarizing in a significant manner and in terms of money, transactions and events, and interpreting the results thereof. Fiscal accounting refers to those transactions and events which are of a financial character.

The objectives of public school fund accounting are (1) to provide a complete record of all financial transactions, (2) to summarize with reasonable promptness financial transactions in financial reports required by proper administration, (3) to provide financial information which would be helpful for budget preparation, adoption, and execution, (4) to provide financial controls or safeguards for public money and property, (5) to provide a basis for placing administrative responsibility and minimize the possibility of waste, carelessness, inefficiency and possibly fraud, (6) to provide clear, concise financial reports to the public as a basis for judging past, present, and future operations of educational program, and (7) to provide a historical record which, over a period of years, can be studied and analyzed critically and constructively for the purpose of aiding citizens, boards of education, and state and school district administrative officers in keeping pace with changing concepts of education and its administration.

As I study these objectives, I find that our present fiscal accounting falls short in at least two main areas. First, it does not provide meaningful information for budget-making, since the budget should reflect educational goals and our accounting system does not address itself to these goals. Second, the present accounting system does not provide a historical record of meaningful information which can be studied and analyzed critically and constructively for the purpose of aiding citizens, boards of education, and state and district school administrators to keep pace with the changing concepts of education and its administration.

The public education enterprise is a thirty billion dollar proposition of such staggering complexity administratively and economically that it is a wonder, not that it works badly in many cases, but that it works at all. That it does operate is a tribute to the thousands of conscientious, devoted, and often brilliant teachers, administrators, and board members. However, it shows signs of breaking down; and, unless we can devise an accounting system which will provide decision-makers with the information needed to develop an educational program which will prepare our children for a life in a complex and advanced society which requires a citizenry of high order, we are in trouble.

School administrators face staggering challenges in the management of their public education responsibilities. They are handicapped in at least seven areas, all related to accounting.

1. In general, school administrators have little comprehensive knowledge of their operating or facility requirements for the next five years. What knowledge they have is general, based largely on intuition rather than formal planning procedures based on solid information.
2. Most school administrators have not established priorities and made decisions regarding fund requests on any systematic basis below the chief administrative office. Because of lack of adequate information, the chief administrator must very often rely again on "intuition" rather than fact in establishing priorities.
3. Budget requests made in good faith are "cut" by taxing authorities, often drastically, resulting in disappointment, wasted motion, and most important, watered-down educational programs. This is due, at least in part, to the inability of school administrators to document their budget requests in terms of educational objectives.
4. Immediate needs almost always demand, not only more funds than are available, but also the complete attention of administrators, thus leaving little or no time for long-range planning toward more permanent solutions to the crucial problems facing public education today.
5. Appropriations are made on the function-object, line-item basis and seldom identified with specific programs or educational goals.
6. Accounting systems do not provide quick, up-to-date information on critical questions which are asked daily by the press, parents, and civic groups. When such information is available, it is often not organized in a manner that simplifies decision-making.

Recently a committee of legislators in Colorado wanted to know how much was being spent, statewide, for vocational education on a per pupil basis.

This is a piece of rather simple information that should have been available at a moment's notice. Yet, no where in our Department nor in the Department of Vocational Education (we're separated in Colorado) was that information readily available. We asked for time to dig it out, but they needed it right away and preferred to settle for an estimate. This, I submit to you, does not enhance the image of school management in the eyes of those who hold the purse strings. I wonder how many states represented in this room today could provide this information to their legislatures?

7. Finally, education does not have the advantage of the stern discipline of a profit-and-loss statement. Educators have resisted attempts at measuring out-put or "sales" on the grounds that it was too difficult to quantify. As a result, the public does not know how well their educational enterprise is doing. I am not suggesting that we can measure with complete objectivity the educational "sales" we have made, but I am saying that we must do a better job of evaluating our efforts than we have in the past if we are to compete successfully for the tax dollar. People don't like to put out money without knowing, at least to a degree, what they are buying.

Now that we have examined the problems about our present public school accounting system, let us together explore an approach to this critical problem which may correct the deficiencies. However, before we do that, let me make it clear that I feel our present accounting system has not been all bad. In fact, we have had during the past ten years the most reliable data that we have ever had. This can be attributed to the handbook program of the U.S.O.E. which has provided a method for accounting on a compatible basis, district by district and state by state. Handbook II was truly a landmark in public school accounting, but it no longer meets the accounting needs of public education. We need a new approach.

The approach I wish to discuss with you is referred to as the PPBS approach, and particularly the MSEIP version of the accounting function of Planning—Programming—Budgeting System. MSEIP stands for Midwestern States Educational Information Project.

PPBS is not a new idea. In 1849 the Hoover Commission recommended that "the whole budgetary concept of Federal Government should be refashioned by the adoption of a budget based upon functions, activities and projects: this we designate a 'performance budget' ". This recommendation was made a legislative requirement by the National Security Act Amendments of 1949 and the Budget and Accounting Procedures Act of 1950. The second Hoover Commission in 1955 recommended a "program budget" and proposed improvements in government accounting that would facilitate budgeting on a cost basis.

The movement received impetus at a meeting of President Johnson's cabinet on August 25, 1965. At this meeting the President declared that "The objective of this program is simple: To use the most modern management tools so that the full promise of a finer life can be brought to every American at the least possible cost." This system is said to have saved billions of dollars in the Department of Defense alone. The budgeting change is quietly revolutionizing the decision-making process on the Federal level by linking program planning or goals to budgeting.

In essence, PPBS outlines the programs in terms of objectives, goals, or missions and the anticipated accomplishments, and estimates the dollar cost of achieving them.

To complete the cycle, evaluation of the objectives or goals is a must in order that we may be able to determine how well we did in any particular "program" and to tell the public what they bought for a given amount of money. In public education this becomes the most difficult phase of PPBS. Yet, as our measurement tools become more sophisticated, I feel that we can do a good job in this area and do it quite objectively. In any event, we must assume that responsibility. If we don't, the evaluation of our programs will inevitably be done by the purchasers of the product—the public—and this type of evaluation is always inaccurate and often capricious.

Once in operation, PPBS will enable us to (1) identify our goals with precision and on a continuing basis, (2) choose among those goals the ones that are most urgent, (3) search for alternative means of reaching those goals most effectively at least cost, (4) inform ourselves not merely on next year's costs but on the second, third and subsequent years' costs of our programs, and (5) most important, measure the performance of our programs to insure a dollar's worth of service for each dollar spent.

The advantages are obvious. For the first time in the history of school district budgeting, "output" in terms of accomplishments would be an integral part of the budgetary process. The decision-making would be greatly facilitated and an information system that permits analytical appraisal of costs in relation to benefits would be established.

The Midwestern States Educational Information Project has developed a model for accounting for a PPBS system for public education. This project was a research-oriented effort on the part of 13 cooperating states to develop an integrated educational information system. It was an attempt to develop a modern, rapid means of delivering to administrators and educators the information for sound decision-making, when it is needed. Funds to conduct the Project were provided by a U.S. Office of Education grant under authority of the Elementary and Secondary Education Act of 1965, Section 505.

The work of MSEIP centered around five commonly recognized areas of educational information: facilities, finance, instructional programs, personnel, and pupils. Each information area was a complement of the total system and was referred to in the Project as a subsystem. As such, each subsystem had to be capable of being integrated with any or all of the other four subsystems and be compatible among all of the participating states.

Five committees, one for each area of educational information, were organized to develop these subsystems.

Early in its deliberations, the Finance subsystem committed itself to the concept of program budgeting and accounting. Its members voted unanimously to direct their efforts toward a system of accounting that would accommodate program budgeting, accounting, and reporting and, at the same time, provide enough flexibility to permit state and local educational agencies easy adaptation to their particular needs and desires.

The system has been developed, It has been refined and will undoubtedly need further refinement. I believe the system has great potential and that much of it will be reflected in the upcoming revision of Handbook II.

Eight coding sections, consisting of a total of twenty digits, are provided for proper identification of expenditures. Seven coding sections, consisting of a total of fifteen digits, are provided for proper identification of revenues. It would be highly improbable that any one school district or state educational agency would find the need to utilize the entire coding capacity provided.

The MSEIP Finance Subsystem Committee was concerned primarily with the SEA's need for a system of financial accounting that could provide control over fiscal resources and also provide information for effective decision making and evaluation. Accepting the premise that fiscal policies of school districts are direct reflections, interpretations, and translations into financial terminology of educational decision making, the Committee determined that a program oriented budgeting and accounting system would most satisfactorily provide necessary data for making these decisions.

The program-oriented budgeting and accounting system fulfills the needs of State Education Agencies for educational cost information, recording financial operations and transactions, and general fiscal accountability and auditing. To provide local districts with the means of reporting financial information in the context of their programs, the system was constructed to include the foundations for a financial accounting system for local agencies. The traditional system of budgeting and accounting does not provide information on what school districts actually get for their money in terms of programs.

The program-oriented budgeting and accounting system is designed to highlight management considerations in budgeting and to point out the educational objectives of policy-makers in financial terms. However, the current overriding need of state agencies for financial information from local districts is for operational use. This is still provided for in the MSEIP program-oriented budgeting and accounting system in a manner which is historically familiar to all school finance managers.

The Finance Subsystem Committee was organized in June, 1966. Its executive officer was a MSEIP Central Staff Supervisor with a background in school finance. A chairman was elected from the membership. The 13 committee members included a representative from the SEA of each participating state. The representatives, appointed by their chief state school officers, were SEA personnel whose positions were either in school finance or closely related. The members of the Finance Subsystem Committee collectively agreed on the inclusion of data items for this Subsystem.

The Finance Subsystem's generalized model was developed with the dual objective of becoming an integral part of the MSEIP System, and of introducing a program-oriented accounting system into an area which has been traditionally fund-object oriented. The successful implementation of such a system will entail a great deal of further study, and involve considerable revision of existing methods and procedures in budgeting and reporting expenditures at local, district, and state level. This Subsystem is not presented as an exhaustive study of educational financial accounting, but as a guideline which will provide better financial information.

The Subsystem, its records, and their dimensions, were developed for optimal recording and reporting at the district level. Great detail is possible at this level within the proposed structure, and could be reported in total or in summary form to the SEA. The system and its implied and expressed procedures could be implemented at the district level on any basis from manual to computer processing and still provide meaningful input to the SEA information system. The structure of information records proposed below facilitates preparation of summary and/or detailed reports in a variety of classification structures for a variety of uses. The key to successful implementation lies in adapting the proposed and existing systems to each other, in utilizing the capacity for detail only insofar as it is practicable at the lowest reporting level, and in insuring that the definition and content of the dimensions are standard and consistent throughout the implementing state.

Because the MSEIP System was designed to provide for interstate information exchange, some areas were left for the individual states to study and integrate into their own systems. The elements presented are intended as least common denominators. For example, no provision is made for the actual state internal accounting and budgeting system in that no tax base information is maintained for state aid computation. The fact that the model does not cover such areas should in no way detract from state efforts to incorporate such areas into the system.

There are five types of records in the Finance Subsystem data file. They are: Assets, Liabilities, Fund Balance, Revenue, and Expenditures.

Although the first four types of records are structured in a manner similar to existing systems, this is intended more as a transitional measure than as a final solution. Their design and use could be further modified and developed to minimize classifying and reporting problems which will doubtlessly arise in the course of implementation and experience. The structure of the fifth type of record (Expenditures) is the real foundation upon which a program-oriented financial information system can be built. Discussion in the following sections and in the discourse to follow will accordingly be limited largely to the expenditure records.

The Finance Dimensions, as used here, implies a grouping of values or factors on which a financial data item may be classified. The fact that such items will have several dimensions gives the system both simplicity and versatility.

The dimensions of a financial data expenditure item are:

Fund
Type of Account
Organizational Unit
Area of Responsibility
Subject Area
Course
Activity
Object

The definitions of these dimensions and the coding scheme have been reproduced for the conferees at this meeting.

Provision could be made for infinitesimal detail by the extension or expansion of one or more of the dimensions, particularly Object. However, even though the list of values assigned to this dimension is merely a proposed list, great care must be exercised in balancing the desirability of more detail with the cost in time, effort, and accuracy of providing it, as well as the increased complexity which is created by further proliferating the lists.

The intention in the proposed Finance Subsystem in its initial implementation would be to collect budget and expenditure information at the state level on an annual basis. Local and district educational agencies could maintain the expenditure information on a current or periodic schedule, and submit this information in detail or in summary form to the state at the end of the reporting year. The proposed budget would be reported for the ensuing year. The budget would be prepared in the same format and to very nearly the same degree of detail as the expenditure information.

Identical formats for reporting proposed budgets and expenditures would permit the use of updating procedures as the means of reporting. The budget would be reported at the beginning of the year and updated or revised, at the end of the year to reflect actual expenditures.

The suggested initial effort does not necessarily mean that the state financial data files could not be maintained in a current status; this will certainly be both desirable and practical in the future as experience is gained and as the concept of automated data processing becomes accepted at all levels. The real versatility and value of the Finance Subsystem is contingent upon the employment of EDP equipment, because only by this means can data be manipulated, analyzed, restructured, and summarized in sufficient manner to justify implementation. However, the problems which will be encountered in implementing and gaining acceptance of and confidence in the proposed initial Finance Subsystem should not be compounded by attempting to arrive at an ultimate goal on the first attempt.

The area of proration and apportionment of certain expenditures which are not clearly assignable to a specific instructional program, but part of which most certainly contribute to its cost, is a matter for future investigation and solution based on experience, as is the area of depreciation. There are many methods proposed in current state and federal publications, and some lend themselves to computerized programming. Unquestionably, the method or methods adopted must be used consistently and uniformly, or the results will be meaningless. Nonetheless, such techniques must be developed by the individual implementing states for application to the information submitted by the districts.

The Finance Subsystem data file would be maintained in district sequence. The records within each district file would be maintained by organization unit. The individual records sequence would be:

District (Header)
Fund
Organizational Unit
Type of Account
Area of Responsibility
Subject Area
Course
Activity
Object

The rationale for establishing a Finance Subsystem file sequence must be predicated upon several factors. The extent to which the total system is implemented and the degree of detail in which the information is reported are two important factors. Another significant consideration is the nature of the reports and analyses done at state level. The proposed sequence assumes full system implementation and detailed reporting. It is conceivable that a state may wish to collect information only at district level, and may not require reporting of expenditures by course of instruction.

In this case, perhaps the file would be sequenced on Area of Responsibility within Type of Record within District, and any sequencing on Organizational Unit would be subordinate to these dimensions. In any case, provision would be made for carrying all of the dimensions, and experience may indicate that sequence other than that initially established would be more practical.

The combinations and permutations possible with the dimension concept of reporting budget and expenditure information are astronomical. The most obvious advantage in reporting capabilities is that information may be summarized on any broad category of a dimension, and that same information also may be reported in detail, rearranged, or restructured with no LEA input requirements. Sample reports are included in the material which has been handed to you.

The steps in attaining the desirable goal of developing a program-oriented budgeting and accounting system cannot be delineated in detail for the MSEIP System, because the exact specifications of an individual state's implementation plan would be prerequisite to a successful system. Certain areas were not considered in depth, but are certainly relevant to such a system and have a direct impact on an overall budgeting and accounting system. Examples of areas not considered in depth were School Lunch Program, Pupil Transportation, and Vocational Rehabilitation. Nonetheless, through the use of the other subsystems, much quantitative and some qualitative information may be extracted for combination with Finance Subsystem information and presented in a useable form for educational management decision processes.

The system is not presented as a complete PPBS system. We consider it to be the necessary first step in developing the system—and that is to provide a method for cost-accounting that will relate to program objectives.

In conclusion, I repeat that the traditional system of budgeting and accounting has served well as a check on the honesty of public officials and as a means of limiting their exercise of discretion in the spending of public funds. It provides a method by which certain amounts of money are appropriated for spending in certain categories that have no visible relationship to educational goals or objectives. It tells how money is spent but says nothing about what is to be achieved.

Program budgeting shifts the emphasis from expenditures to achievements and provides the framework for costing out or determining the quantity of public resources needed to reach the immediate as well as the long range goals of public education.

TOWARDS ADEQUATE EDUCATIONAL AND SOCIO-CULTURAL DATA FOR CONTINUOUS EDUCATIONAL FACILITIES PLANNING IN STATE SCHOOL SYSTEMS

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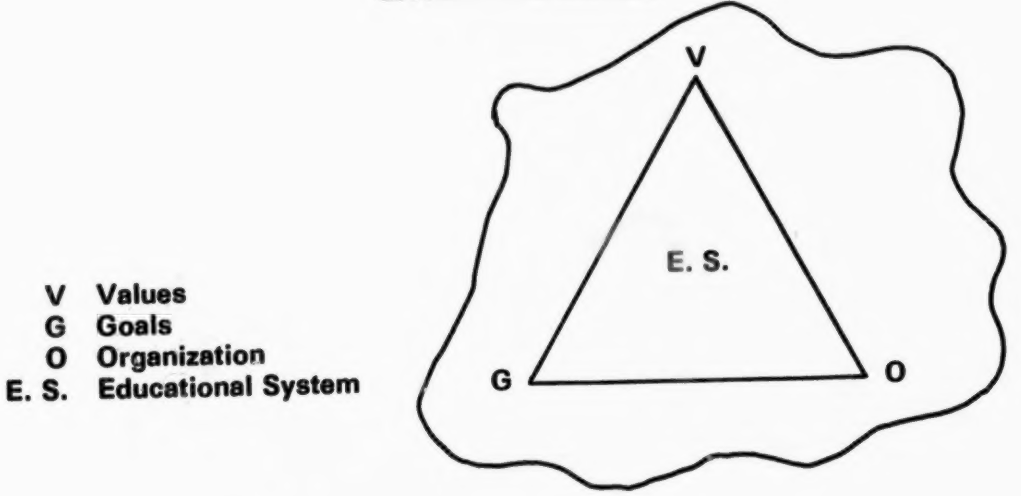
Dr. Donald J. Leu, who has been involved in higher education since 1952, has primarly been concerned with educational planning for public schools and higher education both in the United States and throughout the world. His most recent publications have dealt with a long range educational plan for Chicago, educational changes in Thailand, and the feasibility of a cultural-educational park for Chicago. He has also written about education in Latin America. He is currently Dean of the School of Education at San Jose State College in California. Dr. Leu received his doctors degree in educational administration from Columbia University and did post-doctoral research in the behavorial sciences at the University of California at Berkeley.

Historically, educational facilities planning has been largely restricted to the use and analysis of "internal" data. The school, curriculum, school personnel, students, school finance, and school buildings have provided the raw data for research, planning, and decision making. In recent years the "ball game" has drastically changed. Educational planners are discovering that many of the more significant factors or variables impacting education may be classified as "external" data located outside of the formal educational system.

For example, three recent educational planning projects were initially identified as problems of school buildings. "Internal" data were carefully gathered and analyzed. In fact, all three problems required extensive demographic data, legal predictions, economic analysis, and close planning linkage with a complex metropolitan political intra-structure.

Plate 1 illustrates one model which I find helpful in causing educational planners to externally conceptualize new planning problems.

PLATE 1
EXTERNAL FORCES



During the past decade I have had the privilege of serving as a consultant in educational planning to a number of large educational systems in the United States and throughout the World. Rather than continue with generalizations I would like to utilize a specific planning project to illustrate our attempts to move towards adequate educational-socio-cultural data when engaged in planning in one educational system.

PLATE 2

Towards Continuous Coordinated Educational Planning

Staff Study	Completion Date	
1 Review of Immediate Educational Facility Needs	August 1967	Completed
2 A Feasibility Study of the "Cultural-Educational Park"	January 1968	Completed
3 Recommended Long-Range Educational Plan	June 1968	In Progress
4 Guidelines for Continuous-Coordinated Educational Planning	November 1968	In Progress
5 Continuous Coordinated Area Development Studies (25)	1-5 Years	Require Local Planning Groups
6 Annual Educational Planning Audit	Annually	Review Data Analysis, Research and Planning

In reference to the above "Plan for Planning" five planning principles should be mentioned:

1. The plan for planning starts with the local districts definition and identification of their most crucial immediate problems—"Immediate Educational Facility Needs" and "A Feasibility Study of the Cultural-Educational Park."
2. The plan starts with educational facility planning but quickly moves towards educational planning.
3. The plan for planning moves towards continuous coordinated educational planning requiring linkage and data outside the educational system.
4. Built into the plan is an annual audit or evaluation of the scope and quality of planning.
5. The plan moves from "outside" consultant control and direction towards internal staff control and direction. At all times it requires an "outside" and "inside" team with changing roles as increased planning capacity is achieved by the local staff.

Educational Data for Planning

I am tempted to hypothesize an inverse ratio existing between the quantity and the quality of educational data currently available for planning. For example, in our Thailand educational planning project we are buried in sheer poundage of relatively useless but available educational data. Hundreds of civil service employees spend their entire working day accumulating tons of data. Unfortunately, little of the data has relevance or potentially significant use. Equally disasterous is the unavailability of pertinent educational or socio-cultural data. Thailand is not much different than many of our large school districts. In fact, a number of our state departments of education seem to have adopted Thailand as their data "model."

What, then, explains this chaotic lack of relevant planning data? Obviously, there are a number of plausible explanations and possible scapegoats. The clearest and primary failure, I believe, rests with those of us who pose as trainers of educational planners and research personnel. School district planners are products of our institutions of higher learning. We trained them. And poorly. I do not believe, however, that we can ever efficiently and effectively train educational planners prior to their actively engaging in planning within their local educational systems. Greater gains are available through the continuous in-service route rather than the "Russian Roulette" system of attempting to predict who will be the future planners and attempting to train these "elite" through planning simulation at the University. We have produced and placed approximately 40 educational planners during the past eight years at Michigan State University. Three of them are currently engaged (as their primary task) in the business of educational planning. I am currently working directly with some 30 to 40 educational planners in large school districts. To my knowledge, none of them were formally trained as educational planners.

A second major barrier to securing adequate educational facility data is our current inability to define what educational and external data is significant or relevant to facilities planning. I suspect this blockage has historical antecedents. In the past most educational planning projects focused on the school building and the school budget. Little planning concern was evidenced for what happened inside or around the building. Simple data were required for simply defined problems. For example, a school building's capacity was determined utilizing a standardized formula which ignored the impact of emerging curriculum innovations upon the building's future capacity. Enrollment estimates were developed utilizing survival ratios or cohort analysis techniques restricted to past school enrollment figures. This method simply assumes that enrollment trends will continue as they did in a past period of time. Capacity was subtracted from the enrollment estimates to determine additional space needs. The budget was checked to see if needed monies were available. Then an addition to the school and/or a new school was built. "Eureka! I have completed an educational planning project." Fortunately, the planning game is changing and the above process is usually recognized as inadequate. Incidentally, some years ago myself and others developed instruments designed to "scientifically" measure the educational adequacy of educational facilities. Subsequently we have found that these rating instruments provide invalid measurements of educational adequacy. We have dropped the use of these rating forms—only to discover that they are being adopted or adapted and are gaining in use throughout the United States.

Socio-Cultural Data

It is impossible to identify specific socio-cultural data needed for continuous educational planning in all large school districts. Each planning project and each school district contains enough unique conditions to negate a universal package of data. Therefore, I have attempted to outline the general socio-cultural data needed (and usually available) to assist the planners in increasing their understanding of the *changing* characteristics of the world surrounding a large school district and its needed educational facility.

Prior to outlining needed data it is necessary to determine the unit of analysis: state, city, school district, area sub-districts, secondary school attendance areas, elementary school attendance areas, etc. If one assumes the need for data that has historical, continuous, and comparative characteristics you have eliminated all existing sub-units of the school district. School attendance areas, for example, have a history of minor modification and major change. Total district data provides useful "means" but is of little use in educational planning for the diverse and changing sub-areas of the large school district. Working in cooperation with demographers, city planners, and school district personnel, we develop and utilize "Educational Planning Units." These planning units (E.P.U's) are based on combinations of United States census tracts to insure historical, continuous, and comparative data on relatively small, changing, sub-areas of the city. In Chicago, for example, the City Planning Commission and a commercial demographer (Real Estate Research Corporation) have developed 75 planning units for city planning purposes. We have combined one to four of these planning units into roughly equivalent size "E.P.U.'s" which are closely related to existing school district organization—area superintendents' and district superintendents' regions.

Each E.P.U. may be easily sub-divided into smaller units or combined into larger units for analysis or specific planning projects. I suspect that our E.P.U.'s will become future school district operational units.

The following table outlines the socio-cultural data presently available for educational planning purposes. Time does not permit the illustration and explanation of how each data item may be utilized in planning. Therefore, several data items are expanded and utilized in illustrating their potential use.

TABLE I

Selected Socio-Cultural Data Available To Educational Planners

1. **Historical Development of Region, City, and School District**
2. **Population Growth, Mobility and Future Estimates**
3. **Land Utilization**
    a. **Zoning**
    b. **Existing Residential-Commercial-Industrial Land Use**
    c. **Planned Future Residential-Commercial-Industrial Land Use**
    d. **Traffic Arteries and Traffic Volumes**
    e. **Future Transportation Plans**
    f. **Urban Redevelopment Plans**
    g. **Conditions of Blight**
4. **Educational Level of the Population**
5. **Median Family Income**
6. **Median Age of the Population**
7. **Labor Force Characteristics**
8. **Occupancy, Structural Characteristics, Value, and Rent of Housing Units**
9. **Characteristics of the Non-white Population**
10. **Negro Population Concentrations**
11. **Births to Residents**
12. **Public, Private and Parochial School Adherents**

The following tables were selected to illustrate the potential use of representative socio-economic data in planning educational systems:

TABLE II

Median School Years Completed by Persons Twenty-Five Years Old and Over Minneapolis and Its SMSA 1960

COMMUNITY	MEDIAN SCHOOL YEARS COMPLETED
Edina	13.4
Minnetonka	12.6
St. Louis Park	12.6
Bloomington	12.5
Richfield	12.5
Hennepin County (Total)	12.2
Anoka County (Total)	11.9
Ramsey County (Total)	11.9
Minneapolis	11.7
Dakota County (Total)	11.6
St. Paul	11.4
Washington County (Total)	11.3

TABLE III

Median Family Income, Minneapolis and Its SMSA

COMMUNITY	MEDIAN FAMILY INCOME
Edina	$12,082
Minnetonka	8,180
St. Louis Park	7,808
Richfield	7,721
Bloomington	7,201
Hennepin County (Total)	6,954
Dakota County (Total)	6,843
Ramsey County (Total)	6,747
Anoka County (Total)	6,616
St. Paul	6,543
Minneapolis	6,401
Washington County (Total)	6,330

TABLE IV

Population Trends in Minneapolis, Hennepin County, and Minnesota 1900-1960

Year	Minneapolis	Hennepin County	Minnesota
1900	202,718	228,340	1,751,394
1910	301,408	333,480	2,075,708
1920	380,582	415,419	2,387,125
1930	464,356	517,785	2,563,953
1940	492,370	568,899	2,792,300
1950	521,718	676,579	2,982,483
1960	482,872	842,854	3,413,864

Obviously, Minneapolis is declining in population and possesses a relatively low educational and income level when compared with its adjoining school districts. Creative educational planning would recognize these and other socio-economic data when designing educational plans and resultant facilities.

Recent years have witnessed an increasing awareness of the importance of including racial-ethnic considerations in educational planning. The reasons for introducing this new variable are philosophical, moral, legal, political, economic, and educational. Adequate, accurate, continuous, and predictive socio-economic data ("external" data) have rapidly become of primary importance in educational planning. Our current Chicago educational planning project succinctly illustrates the need for adequate socio-economic data when engaged in educational planning. Selected data are extracted from our most recent planning project to illustrate the impact of external data on educational facilities planning.[1] Data were provided by school planners, city planners, and a private demographic firm (Real Estate Research Corporation).

Selected Excerpts from the Demographic Data follows:

A. "Understanding of the racial integration aspects of Chicago's Public Schools rest upon full awareness of certain basic facts about the population and housing in Chicago, with the first set of facts concerning the situation as of 1960.

1. Non-white, mainly Negroes, comprised 24% of the city's population in 1960.
2. During the period 1950 to 1960, the non-white population rose 328,000 (or about 33,000 per year) but the white population declined 398,000 (about 40,000 per year) . . . Net out-migration was really 675,000 or about 67,000 a year . . .
3. The non-white population is much younger than the white population and therefore has a higher rate of natural increase, and also contributes more children to the school-age population.
4. Negroes living in two major radial extensions out from the central business district towards the west and the south." . . .

B. Real Estate Research Corporation forecasts for the future are based upon a reduction in the net in-migration rate of non-whites (to about 7,3000 per year for the period 1975-1980) and fertility rates among both non-whites and whites, and a reduction of white out-migration (to about 40,000 per year)—yet they show the same basic trends continuing.

1. The white population will continue to fall, dropping around 200,000 persons every five years, or about 40,000 per year—about the same as from 1950 to 1960.
2. The non-white population will continue to expand, as follows:

1960-65	147,000
1965-70	145,000
1970-75	130,000
1975-80	128,000

3. Therefore, the population balance will continually shift toward a higher proportion of non-whites, *unless some drastic changes in residential settlement patterns occur.*

The percentage of non-white will be:

1960	26.8
1965	31.5
1970	36.4
1975	40.9
1980	45.6

4. These trends will have very significant impacts upon the nature of the children enrolled in the public and private schools in Chicago, with the proportion of non-white rising very sharply in the public schools even within the next eight years . . .

C. Certain fundamental conclusions emerge rather dramatically from these data.

1. A crucial factor which any policies must take into account is the continued expansion of the non-white population, which presumably will remain focused within the city limits of Chicago.
2. The second conclusion is that any policies aimed at influencing the racial balance in public schools in the city must take effect at once—if they are delayed in impact for 30 or even 20 or 15 years, there will be no white students left in the city with whom to integrate.
3. The third conclusion is that no ultimate solution to achieving integrated schools is possible without shifting future non-white growth to the suburbs, or in some other way involving the suburban white children with non-whites now, or to be, located in the central city.
4. The fourth conclusion is that any attempt to influence these trends is really an attempt to decide through public policy where people of various races and economic levels will live, or be persuaded to live, in the future.

Obviously, a racial "tilt" from white to non-white averaging 4.5 city blocks per week has tremendous implications for educational planning and clearly illustrates the need for adequate socio-cultural data when attempting continuous educational facility planning in large school systems.

Changing Legal Data in Planning

Legal knowledge, legal information and legal predictive skills are becoming increasingly important to educational planners. In fact, the physical size, fiscal support, socio composition and educational programs of state school systems (and their sub-systems) are being shaped or modified by past, present, and future legal decisions. Therefore, educational planning must utilize another external source of data information—legal data. Data need not be restricted to numbers, tables, charts, and computer programs. One correct definition of data is: Things known or assumed; facts or figures from which conclusions can be inferred.

Creative continuous educational planning requires theoretical—predictive skills by the planners. "External" legal data are needed to aid the planner as he attempts to understand, explain, predict, and recommend action plans for the future.

For example, a study of selected school districts in Michigan revealed wide variations in socio-economic characteristics and resultant educational needs while the existing state fiscal support system completely ignores these variations in external data.[2] Table V summarizes a portion of the data.

If one makes the following legal-educational assumptions:

1. Education is a state function.
2. Local school districts are sub-systems of the state.
3. Wide variations exist in educational needs. (See Table V)
4. Wide variations exist (between school districts) in fiscal capacity to support education.
5. Wide variations exist (between school districts) in fiscal expenditures per pupil and in quality of education.
6. The more favored (in terms of social-cultural factors) students generally receive higher educational expenditures.
7. The less favored (in terms of social-cultural factors) students require higher educational expenditures.
8. Our constitutions (State and Federal) support equal educational opportunities.

Then—the existing state fiscal support program is obviously unequal, discriminatory, and unconstitutional. The point is that socio-cultural data is of prime importance in educational planning. Incidentally, the legal-educational

TABLE V

Rank Order of Cities With 8,000 or More Resident Public School Membership According to Their Total Per Cent On Selected Socio-Economic Characteristics

RANK	CITY	TOTAL PER CENT
1.	Detroit	100.58
2.	Pontiac	81.84
3.	Battle Creek	76.56
4.	Flint	73.06
5.	Saginaw	65.18
	Mean - State of Michigan	
6.	Ann Arbor	63.37
7.	Jackson	61.85
8.	Kalamazoo	58.80
9.	Hazel Park	58.45
10.	Muskegon	56.35
11.	Grand Rapids	55.72
12.	Ferndale	55.11
13.	Birmingham	54.26
	Mean - 29 Districts	
14.	Dearborn	53.26
15.	Wyandotte	52.22
16.	Wayne	51.28
17.	Lincoln Park	5.12
18.	Warren	50.96
19.	Port Huron	49.42
20.	Lansing	47.62
21.	Southfield	46.65
22.	Royal Oak	45.43
23.	Roseville	44.87
24.	East Detroit	44.05
25.	Garden City	43.02
26.	Midland	42.54
27.	Berkley	42.14
28.	Livonia	41.35
29.	Bay City	32.00

SOURCE: The totals represent the sum of the per cents for the following socio-economic characteristics: (1) Non-white; (2) Family income less than $2000; (3) Native to other state; (4) Foreign born; (5) Unemployed; and (6) 5-17 not in school.

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issue embodied in the above data and assumptions has just been launched into our court system.

Summary

This paper has fallen short of its assigned task—identifying the educational and socio-cultural data needed for continuous educational facility planning in state school systems. The task is impossible. Hopefully, the need for and type of "external" data has been partially identified. Assuming that needs for external data are determined, and the specific data needed is secured (in usable form) several major tasks remain. The educational planner must develop or utilize a rational and sequential method of utilizing available data. This methodology, which I call "A Plan for Planning," must operate within the existing constraints of time, money, human resources, and "know how." In order to develop this

Plan for Planning, I find systems analysis a most useful device in forcing me to organize and plan logically. It does, however, possess the same basic limitation of computer programs—"garbage in, garbage out." The "Subnet" on the following pages—Pages *16a, 16b,* and *16c,* illustrates a portion of one of our current planning projects.

An analysis of the "Pert charts (Pages 16a, 16b, and 16c) succinctly summarizes our planning process and strategy:

1. External data (external to the formal educational system) have been added to our planning data bank.
2. Data are developed and/or contracted for in a predetermined sequential order with an assessment of time and input needs.
3. Educational planning requires a coordinated team of data and research specialist—local school system personnel, other local governmental and non-governmental agencies, external specialists, and external planning consultants.
4. Each member of the planning team has changing roles and responsibilities as the planning progresses.
5. "Wiring the system" (coordinated, continuous, educational planning) which taps external planning resources, can build an improved multi-directional communication network and result in improved planning along with increased understanding and support by external groups.
6. The changing socio-economic-political-legal world surrounding educational systems should provide relevant data for educational planners.

In summary, relevant educational and external data must be identified and arranged as sequential inputs to aid planners in the challenging task of designing new educational plans and options for our large school districts. The success or failure in "recycling" our decaying central cities will be significantly impacted by the quality (not quantity) of our endeavors.

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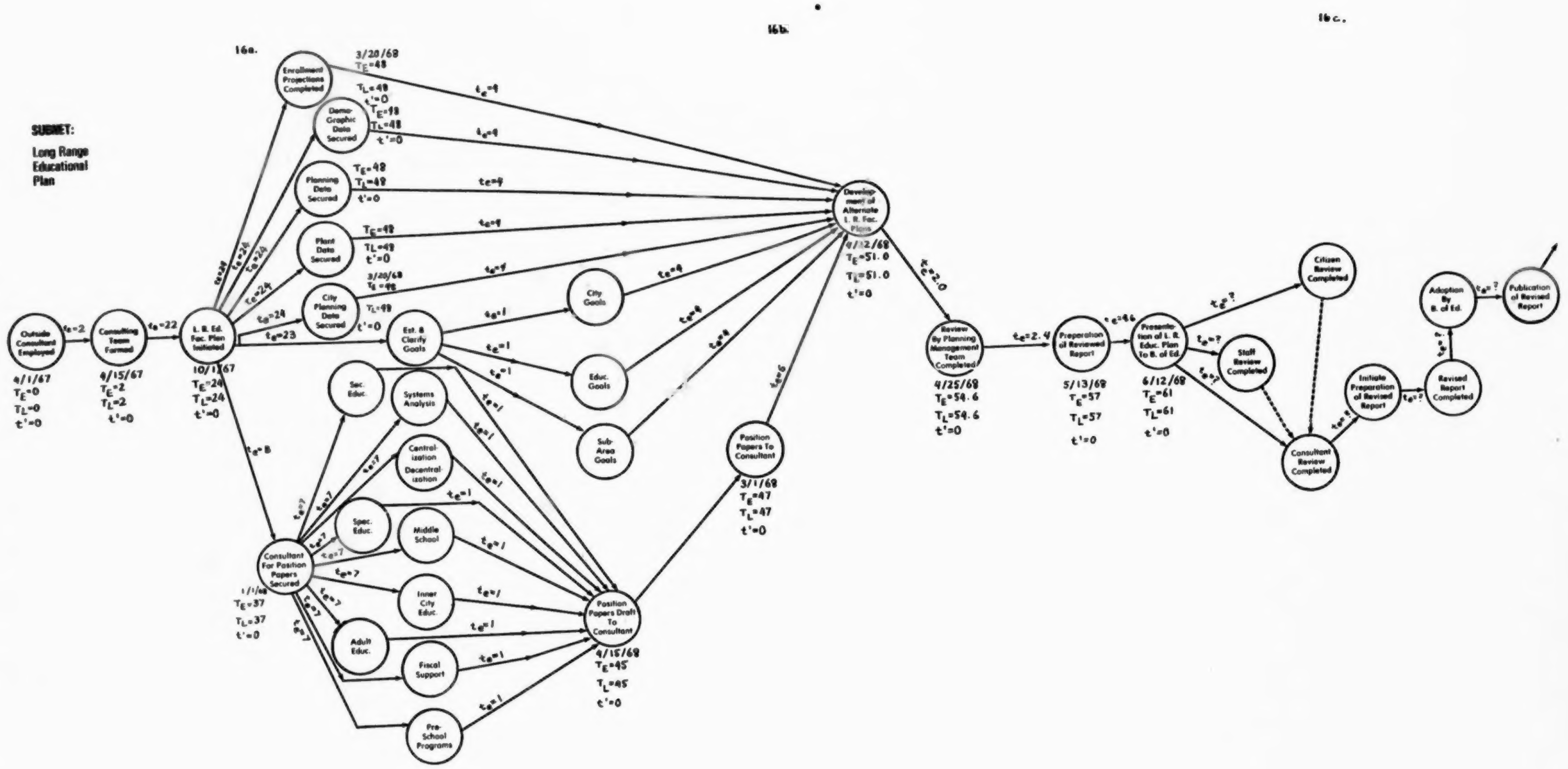
[1] Leu, Donald J. and I. Carl Candoli. *A Feasibility Study of the Cultural-Educational Park for Chicago.* Chicago, Illinois: Chicago Board of Education, 1968. pp. C-1 to C-9.

[2] Leu, Donald J. *A Look at Michigan Schools—An Analysis of Selected Social and Economic Characteristics.* East Lansing, Michigan: College of Education, Michigan State University, 1963. 85 pp.


SUBNET:
Long Range Educational Plan
16a.
16b.
16c.
Outside Consultant Employed
4/1/67 T_E=0 T_L=0 t'=0
t_e=2
Consulting Team Formed
4/15/67 T_E=2 T_L=2 t'=0
t_e=22
L. R. Ed. Fac. Plan Initiated
10/1/67 T_E=24 T_L=24 t'=0
t_e=24
t_e=24
t_e=24
t_e=24
t_e=24
t_e=23
t_e=8
Enrollment Projections Completed
3/20/68 T_E=48 T_L=48 t'=0
Demo-Graphic Data Secured
T_E=48 T_L=48 t'=0
Planning Data Secured
T_E=48 T_L=48 t'=0
Plant Data Secured
T_E=48 T_L=48 t'=0
City Planning Data Secured
3/20/68 T_E=48 T_L=48 t'=0
t_e=4
Est. & Clarify Goals
t_e=1
City Goals
Educ. Goals
Sub-Area Goals
Consultant For Position Papers Secured
1/1/68 T_E=37 T_L=37 t'=0
t_e=7
Sec. Educ.
Systems Analysis
Centralization Decentralization
Spec. Educ.
Middle School
Inner City Educ.
Adult Educ.
Fiscal Support
Pre-School Programs
Position Papers Draft To Consultant
4/15/68 T_E=45 T_L=45 t'=0
t_e=6
Position Papers To Consultant
3/1/68 T_E=47 T_L=47 t'=0
Development of Alternate L. R. Fac. Plans
4/12/68 T_E=51.0 T_L=51.0 t'=0
t_e=2.0
Review By Planning Management Team Completed
4/25/68 T_E=54.6 T_L=54.6 t'=0
t_e=2.4
Preparation of Reviewed Report
5/13/68 T_E=57 T_L=57 t'=0
t_e=4.6
Presentation of L. R. Educ. Plan To B. of Ed.
6/12/68 T_E=61 T_L=61 t'=0
t_e=?
Citizen Review Completed
Staff Review Completed
Consultant Review Completed
Initiate Preparation of Revised Report
Revised Report Completed
Adoption By B. of Ed.
Publication of Revised Report

PROGRAM ACCOUNTING IN STATE PLANNING

Robert L. Hopper, Director
Southeastern Educational Corporation, Atlanta, Georgia

Dr. Robert L. Hopper has been involved in educational research and higher education since 1947 when he became director of educational finance for the New Hampshire State Department of Education. Since then he has been director of research for the American School Publishing Company, a professor of educational administration, a school dean, and director of the Division of State Agency Cooperation for the U.S. Office of Education before becoming director of the Southeastern Educational Laboratory, serving Georgia, Alabama and Florida. While in Washington Dr. Hopper directed for a two-year period the Select Congressional Committee that evaluated large governmental contracts. He has been chairman of the several Visitation Committees of the National Council for Accreditation of Teacher Education and since 1956 has been a consultant to American Schools in Mexico and South America. Dr. Hopper received his doctors degree from New York University.

The concept of long-term planning and program accountability is not new in education, but the application of refined program planning accounting techniques in education is a new and exciting challenge. Previously, State agencies have not had time nor personnel to undertake planning. Since 1965, funds have become available for essential planning activities.

Through more exacting planning, agencies may identify goals, plan programs to meet goals, view alternate strategies, allocate resources, assess outcomes of programs in precise terms, and utilize program accounting techniques. The end product for a state education agency is to attain the greatest efficiency and effectiveness possible for its program operations. Previously, State agencies have not devoted significant amounts of funding for instruction, and accounting for instructional activities. Today, resources are available for a more exacting type of planning and accounting, which I would like to describe.

1. *Goals*

Each state education agency serves a variety of purposes. The limits of an agency's operation are set forth in a state's legal structure. The agency has responsibility for the leadership supervision and support of education, from kindergarten through two years of college, in most states. The concept which must be established is what the agency anticipates doing in each program area, at each level of education. Although the setting of goals appears simple, it is actually difficult and perplexing if it is to be the basis of long-term planning. The goals or program objectives must be stated in behavioral terms in order to provide the basis for long-term assessment. It also requires a priority ordering of goals and sub-goals.

Let's examine a specific area. Most state agencies would have as a goal the maximization of learning opportunity for each child. Stated at this level of abstraction, the goal is difficult to assess. To move to the next level, one might identify as a goal, the enhancement of learning for under-achievers. The objective begins to get at a level where measurement is possible.

A state agency staff may develop a precise program in which a specific group of staff members performs certain functions, such as leadership, consultative services, and technical services. Objective data may be analyzed to determine the extent of under-achievers, with sub-goals established at each grade or age level in each subject area. At this level of specificity, goals are set in quantitative terms which may be measured and assessed.

2. *Program*

From the set of goals developed in each area of agency responsibility, programs are designed to pursue the goals and attain specific outcomes. Perhaps this is where most of our energy has been exerted. If a major goal is to provide driving skills for each child at the age of 16, the state agency would develop programs which specify the number of teachers for the state and local schools, the equipment needed, the instructional materials needed, time requirements for the program, teacher preparation needed, and the extent to which the state agency will be involved.

Planning each program requires expertise in the particular subject area, review of research and state of the art, and availability of resources for the program. State agency personnel find in many areas that specific legislation may be required to install new programs, although the more traditional subject areas normally have the legal basis for operation of a particular program. Good programs do provide consideration of all factors, and deal with each program phase in specific terms to allow appropriate future assessment.

3. *Alternate Strategies*

Each program plan represents a method or strategy of dealing with a particular area. Normally, the strategy set forth is drawn from the experience of the planners and the usual ways the state agency functions. In long-term planning we have an opportunity to explore different approaches or methods of operation.

How does your state agency now function? Are you able to assess the effectiveness of a given program staff? Let's use as an illustration the elementary education staff. Assuming you have a staff of five people, what do they actually do, what is specified for such a staff to do in the program plan?

Let me dignify four operational methods by calling them strategies, such as:

a. Prepare curriculum guides or instructional materials.

b. Hold conferences for local administrators, supervisors, and teachers.

c. Consult in local schools with the concerned educational staff.

d. Visit classrooms throughout the state to provide technical assistance to teachers.

It is not unusual to find a single, primary strategy used in a state agency. From experience, the agency personnel of a state believes that the method of operation used produces the best schools. In planning and budgeting for the future we must ask the question, what evidence is there to indicate that a particular strategy really produces desired results? It may be that alternate strategies may be tried in order to develop cost-effectiveness data. Through such means, a staff may determine for itself the most effective strategy at a particular stage of development. I would hypothesize that a strategy which involves several approaches may be most productive in the long run. However, each agency must see alternatives, and vary their strategy with factors and conditions faced by a staff.

4. *Allocation of Resources*

From the goals, plans, and strategies of a particular program, costs can be assessed in meaningful terms. Cost estimates for such items as travel, printing, and consultants can be assessed in terms of program output. Determination of related costs can also be established. For example, if a program requires a number of part-time personnel, will the personnel office have the capability of recruiting needed staff within their resources? Or, if a variety of drafts of materials are required, will the reproduction unit have the necessary capability to produce the materials?

Since my topic is in the area of program accounting, I shall not dwell upon costing systems. Both your state government and the federal government have costing systems which must be taken into account. The essential ingredient is to see within each state the deployment of resources to a total program, regardless of the funding sources. In this area we have quite a distance to go in most states. Perhaps this area may present some opportunities for discussion following these formal remarks.

5. *Program Assessment*

Assessment of program activities are a natural follow-through of precise planning and budgeting. It serves as a basis for amending long-term plans, installation of varying strategies, and refinement in the allocation of resources.

Although specialized staffs need to collect and provide program and budgeting information, the involvement of each program staff is necessary. As trends are established, a particular program staff may determine for itself that new approaches are required involving new roles for each staff member. Obviously, the greater the involvement of staff in making such assessments, the greater the correlation can be between an individual staff member's purposing and the agency's purposing. By using a centralized assessment system, there is the great risk of reducing the creativity of each professional staff member. In the long-run, planning and assessment responsibilities must be shared by all staff members.

6. *Program Accounting*

Accounting systems for state educational agencies are now being developed to serve the purposes which I have been describing. These systems will assist in decision making processes by professional agency personnel, state boards of education, and state legislative bodies. Related to data on state agency operations must be data reflecting actions of local educational agencies.

Planning by local agencies, institutions of higher learning, and other agencies are affected by such accountability. Specific studies, such as teacher supply and demand, become relatively simple and timely, and can assure a state of meeting educational requirements on a long-term basis.

Summary

To conduct the type of planning, resource allocation, and assessment activities I have been discussing today, information systems have to be constantly improved. Prior to data processing, planners despaired at the thought of this type of sophisticated planning. Today we need to make certain that each bit of data is needed. In many cases, such as determining achievement levels, we know that it is possible to use sampling techniques very effectively, conserving time and money.

Finally, a few state educational agencies will have the resources to undertake all that needs to be done at any time. Priorities must be established. Although priority determination within and among programs may produce stress among staff members, the process can result in long-term effectiveness and efficiency. Current programs and activities can be revitalized, and a total state educational agency can become the viable, dynamic institution required by the times.

Our schools can be improved, both through additional funds and a better investment of available resources. The tasks are sometimes difficult, but the payoff is in terms of greater educational opportunities which serve the needs of each child.

PROGRAM-ORIENTED MANAGEMENT INFORMATION

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Dr. Burton D. Friedman is a staff member of Public Administration Service. He has provided assistance in the installation of a computer-based management information system for the Maryland Department of Education. Since receiving his doctors degree in the administration of higher education from Michigan State University in 1961, Dr. Friedman has worked in Latin American education and served as a consultant in the areas of educational policy, program development, educational institution development and financial administration for several universities, colleges and education agencies. Dr. Friedman's experience in financial management has been extensive. He directed a reconnaissance study of financial management and the design of general and budgetary accounting systems for the University of Puerto Rico. He also participated in a study of internal procedures of the governmental purchasing agency for the Puerto Rican government. Elsewhere in Latin America he has participated in a series of studies for the Republic of Nicaragua, including national budgeting, budgetary accounting and related reporting, general accounting, auditing, income tax administration, and general organization and management.

One of my colleagues from PAS, Mr. Michael Meriwether, is next on the schedule. His assignment is to discuss planning, programming, and budgeting. To some extent, our two presentations will overlap. We presumably reinforce each other. I hope that between us we have something useful to offer, but we haven't checked signals very thoroughly. I am not even sure we are in complete harmony, but that is part of the open-ended nature of the planning problem.

Somebody who works in an educational enterprise needs to know something about *the nature of the enterprise*. And if he is there in a management capacity, then he also needs to know something about the *nature of management*. It seems to me that anybody in a management slot—in any kind of enterprise—is in trouble if he does not have both sets of knowledge. The educational enterprise is peculiar, it seems to me, in that many people in executive slots not only *don't* know but very frequently scorn to know, scorn to learn what management is about. Planners certainly should know, because planning is one of its basic components.

Our focus is on planning in the state education agency. We might well start by once more reviewing the so-called "functions" of the agency, for these are indicative of what is to be planned. Kent Alm and I probably offer slightly different formulations of what the functions are; but in essence, I think, the formulations coincide.

I suggest that there are "operational functions" which include such items as providing services to individuals, rendering services to local agencies, supplying support activities (in the way of material and financial aid) to local agencies, and operating certain facilities (for example, it is fairly frequent for a state agency to run a school for the blind or to operate a library). The second cluster of functions, which I term "regulatory," includes all the accreditation, certification, licensing, and safety regulation kinds of activity. The third is the "leadership" cluster of functions, in which I would place the R & D kind of activity, the dissemination kind of activity, the demonstration kind of activity.

State agencies have engaged in all of these. However, my understanding is that state agency past practice has tended to emphasize the first two clusters. At present and for the future, presumably, the trend is to emphasize the leadership cluster of functions.

Leadership Functions

It seems to me that the leadership role emphasizes the items listed in Figure #1. The agency first has to identify major problems regarding the improvement of public education, and then must aim to resolve or alleviate the problems. Hence it has to: identify the needs and resources; identify the objectives and problems; develop criteria and standards. (That coincides, it seems, with the view Kent Alm has expressed; that pleases me, because we hadn't checked signals.) Then the agency has to: analyze alternative policies and activities that purport to treat problems; select some alternatives that are likely to be useful; and identify an allocation pattern for the use of state-distributed resources, a pattern that is likely to stimulate effective progress toward the selected objectives. This latter task of leadership involves some measurement of the resource requirements.

FIGURE #1

SEA "FUNCTIONS"

OPERATIONAL
REGULATORY
LEADERSHIP

1. IDENTIFY	**Objectives & Problems** **Needs & Resources** **Criteria & Standards**
2. ANALYZE	**Alternative Policies and Activities**
3. DETERMINE	**Resource Needs** **Allocation Pattern**
4. APPRAISE	**Effectiveness & Quality**
5. STIMULATE	**Research, Development, Test, Demonstration, Diffusion, Dissemination**
6. MANAGE	**Resources & Activities**

Perhaps it was Merlin Duncan who earlier today used the phrase "pattern (or plan) of public expenditures"; that is precisely what must be developed. The task is to develop and use evaluative processes regarding the effectiveness and the quality of educational activities. (Kent Alm said that, too, in slightly different language.) Implicit are the conduct and the promotion of research and other activities to develop, demonstrate, and disseminate improvement-oriented concepts, practices, methods, procedures, material, and so forth. Finally, there is the function of managing the resources and the activities that are directly under the state agency mandate.

Conceptually, at least, it seems to me that these so-called "leadership functions" are very closely akin to what often are called the "elements" or "processes" of management, i.e., the basic factors recognized as the content of "management" in a large-scale and complex organization. Quite bluntly, then, state education agency professionals have to become—if they are not Yet—"pros" in what can be called management as well as "pros" in their knowledge and understanding of education.

Management Processes

In Figure #2, I have listed what I think are 12 management processes. (There are different ways of formulating these; for example, many of you who have studied administration must have come across the coined work POSDCROB, which was Gulick and Urwick's acronym for the elements of administration.) Three or four or five of the dozen relate very directly and very explicitly to what we are calling planning here.

FIGURE #2

Management Processes

1. **Anticipating the Future(s)**
2. **Planning**
3. **Programming**
4. **Organizing**
5. **Budgeting**
6. **Financing**
7. **Staffing**
8. **Administering**
9. **Controlling**
10. **Evaluating**
11. **R & D "-ing"**
12. **Relating**

Anticipating the Future(s)—the first process recognizes the need for "anticipating futures." This process is not quite that of projecting current trends, nor quite the same as predicting what is going to be: it is anticipating what *might* be. The most intriguing recognition of this process is embodied in an institute at Syracuse University. Its whole purpose is to try to anticipate futures—not to predict *the* future, but to depict perhaps a half-dozen assorted futures, all reasonably well-articulated, reasonably well-conceived pictures of what society is apt to be like a few decades ahead. A description of future #4, for example, is expressed in a scenario of that future. (Scenario is an "in" word these days.) Included in each scenario is a notion of what education is apt to be like in the specified future. If education is going to be like that, then what kinds of educational institutions, actions, developments, resources, and policies would be needed? If you *want* the future to go that way, what will we need starting tomorrow, to begin to move events that way, and what will be needed a few years hence? In short, a speculative and science fiction notion is applied. (As a matter of fact, one of the best indications about that group at Syracuse is that I think they have been reading science fiction; and I don't say this facetiously.)

To anticipate possible futures is not quite the same as to draw a definitive plan for what we are going to do. But it certainly is an aspect of planning, and it is a kind of planning that has to go on whether the state agency elects to "do it yourself" or relies upon other enterprises to do it. Either way, anticipating the futures is one process in which management of the state agency has to be concerned, involved, and perhaps active.

Planning—the next process is "planning" as more conventionally understood, that is, the definition of objectives plus the recommendation of general and specific policies and actions to guide efforts toward the stated objectives. I have not seen a satisfactory definition of planning, and I don't pretend that this statement is very good; but there clearly is a difference between speculative notions of what the future might be or ought to be, and the more narrowly limited statement of what our agency *shall* be doing. (I trust, in any case, that Mr. Meriwether will provide more careful definitions of planning, programming, and budgeting, at least, in his presentation.)

Let me hasten through the other management processes. You can see that the processes do not always differ very much one from the other, they are not entirely discrete processes, and they do overlap with each other.

Programming—I refer here to the selection of activities that are believed appropriate for pursuing and accomplishing agency objectives, once you have chosen some objectives.

Organizing—the selection of institutional structure that is appropriate to the set of objectives and activities.

Budgeting—the determination of resources needed for the conduct of defined activity during stated periods of time.

Financing (or fund raising)—how do you get what you need if you are to do what you think you need to do.

Staffing—definition of personnel requirements plus recruitment, selection, and development of personnel.

Administering—the day-to-day decision making, supervising, and coordinating of the work.

Controlling—the management process that makes sure that activities are done as planned, in accordance with policies, and makes sure that resources are utilized to economic advantage.

Evaluating—how effective and useful were the activities and resource allocations, as viewed against the stated objectives? Evaluating requires feedback of evaluative data into the planning, programming, and budgeting processes.

Institutional Research and Development—the conduct of studies (or the sponsorship of studies) to identify needs for improvement, to develop means for achieveing improvement, and to introduce, test, and improve new developments before they go into general application.

Finally, *Relating*—the process I have tagged with this term is intended to mean management's task of fence building, relationship building, liaison, and public relations; I really am not sure what to call this process. It is quite clear that there are identifiable major internal and external publics with which the management of an enterprise deals. The processes of staffing, for example, and organizing serve partly to provide the relationship building that must go on internally; state agency management also must maintain communications with all its external patrons and clients.

The condition of all processes must be "go," constantly and concurrently. The enterprise can't stand still while planners design a plan. As a matter of fact, there is a sense in which planning itself goes on at every point in the enterprise: even the lowest ranking clerk plans her day. However, we are not talking here about that ubiquitous kind of day-to-day or even project planning.

Information Systems

The generic kind of planning is not at issue in this institute, it seems to me. Our focus is very explicitly on the particular kind of planning that the agency's management performs, en route to deciding which way the enterprise is going to go. For each of these 12 management processes, there are some information requirements. It seems clear that every one of the management systems in the enterprise is related to the performance of at least one of the management processes. There exist a flock of information systems and information sources that may very well have been designed to serve just one specific process. But it turns out—because these processes overlap—that there are a lot of intersections: every time two or more processes intersect, a system designed for one purpose proves to be pertinent to another purpose. This means that it is not necessary to maintain a one-to-one relationship between information systems and either management processes, organizational units, or agency functions, because a given pool of information may be useful more than one way. I have suggested just a few of the kinds of information that are required; see Figure #3.

FIGURE #3

Information Systems—Data Bases

Environmental Info
Investment Info
Outcome Info
Property Info
Educational Info
Work Measurement Info
Personnel Info
"Intelligence"

Don Leu underscored the need for the first type, environmental information—what's the population, where it is, which way it is going, what the economy is, what the transportation system is, what the resources are, and so forth. I don't know how to spell out that need in detail. I certainly don't suggest that a state education agency should *generate* all the environmental information that it utilizes. To do that, we rely on the census bureau, bureau of labor statistics, state commerce department, and so forth.

Second, there is educational information of the BEDS (Basic Educational Data Systems) and the MSEIP type. Those systems gather data about the education business, to the extent that is measured by what's going on specifically in the schools.

I would not quarrel that the BEDS or MSEIP approach is not useful; but neither is it sufficient, any more than the environmental information alone is sufficient. At any rate, it seems clear that we do need to know about environment and we do need to have the BEDS-type basic educational data. I think we need investment data, work measurement data, outcome data, personnel data, property data, and "intelligence." In all, I've enumerated eight packages of essential information.

I'll not attempt to detail these, but a few require some clarification. For example, under "personnel" information, I mean to include not just staff resources of the school systems and staff resources of the state agency, but also the "manpower" kind of information, because the manpower problem is part of society's reasons for supporting school systems and higher education institutions. Similarly, by "investment" information, I mean to refer to the disbursements of educational systems, agencies, and institutions; the term suggests endorsement of the view that resources devoted to education *are* "invested" wisely, *do* have a pay-off, and are not merely consumed. The secret agent connotation of the term "intelligence" is appropriate: a chief state school officer *needs to know* the mood of the members of the legislature, the mood of the governor, the temper of the district superintendents, the PTA, or the teachers' unions and so forth, as well as the mood of the general public with respect to education. Do we know how to go about gathering intelligence or putting together an intelligence network? We should, because it is quite clear that—in addition to "hard" data—there is some other "intelligence" that has to be possessed by the agency and particularly by the chief state school officer.

Specialized and Comprehensive Planning

So much for the preliminaries: the state agency has leadership functions to perform; these relate very closely to the processes of management in large enterprises; all processes rely upon ample and varied information; to satisfy that reliance, systematic information-generating arrangements are needed.

I was going to offer some texts for this sermon. One: "When the blind lead the blind, they all shall fall in the ditch." The second is: "In the land of the blind, the one-eyed man is king." Both are pertinent to the business of this Institute, and to Kent Alm's reference to the vacuum that nature abhors. Whenever there is an information vacuum, he who takes the initiative will tend to fill it. At the moment, to judge by comments offered during these Institute proceedings, there are many vacuums; if the state agency chooses to act seriously, it can grasp and maintain the initiative.

A third key to this sermon is one of my favorites: "The neck-bone is always connected to the toe-bone." Every one of the management processes is connected to every other process. (There are a lot of analogues on this theme, for example: if you push the ballon in one place, it bulges some place else, but it remains the same size.) The interconnections in education are of that sort: the business of schools and of higher education, the state agency, city government, and over-all state government—all these are so "intertwingled" that somehow they clearly are one large business. Certainly it appears so when attention is addressed to planning.

At this point, let me introduce Figure #4, which may be helpful for illustrating the many connections. We have some specialized kinds of planning, first. In your state agency, surely every division, every section, every unit, and every professional does some kind of planning. Some of the planning centers around a matter of technique. Some centers around a matter of process. Some has a territorial focus (or, as the figure suggests, a focus on district). Instead of a territorial or geographic focus, some planning is geared to a particular kind of clientele, a particular kind of problem, or some other specialized view of education.

A good illustration is available within higher education. The university, typically, is organized in attention only to the established academic disciplines and in attention to the few standard, traditional professions. But now there are flocks of "new" disciplines, professions, and substantive matters that merit attention. These include *substantive* problem areas (for example, pollution) and *geographic* problem areas (example, Latin American area studies or urban studies). Necessarily, some professional people concentrate their attention; hence, specialized planning is addressed to such matters, viewed essentially in isolation.

Then there is something we may call "comprehensive planning," where the specialized views overlap and must be reconciled. Somewhere within your state government, there may be a unit performing some comprehensive planning on an across-the-board basis; i.e., not just for education and perhaps not even for exclusively governmental activity, but comprehensive planning that includes very broad gauge "future-inventing" or speculating. Perhaps that unit also performs a more narrow, but still comprehensive, planning that is limited to the scope of state governmental activities.

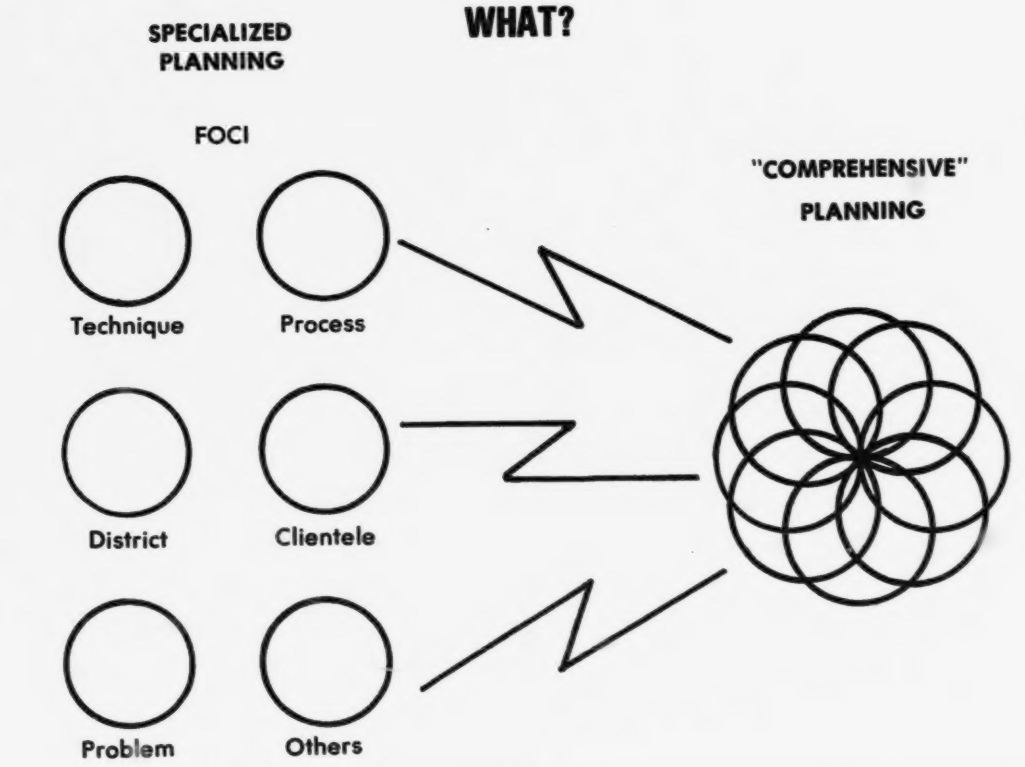
Similarly, within a state education agency there is a kind of comprehensive planning that cuts across the organizational lines of the agency and across the various strata of the state's educational structure. Let's look at the phenomenon in other jurisdictions, as well, as suggested in Figure #4.

The varieties of planning also occur in local or regional organizations. There are the usual numbers of operating departments, each of which may engage in more or less specialized planning, but within its own sphere each may also do something called comprehensive planning. The governing board or council is concerned with the comprehensive version of whatever planning the departments do. There even may be a staff agency designed to serve as a "planning body" for the jurisdiction, and *it* is engaged in comprehensive planning.

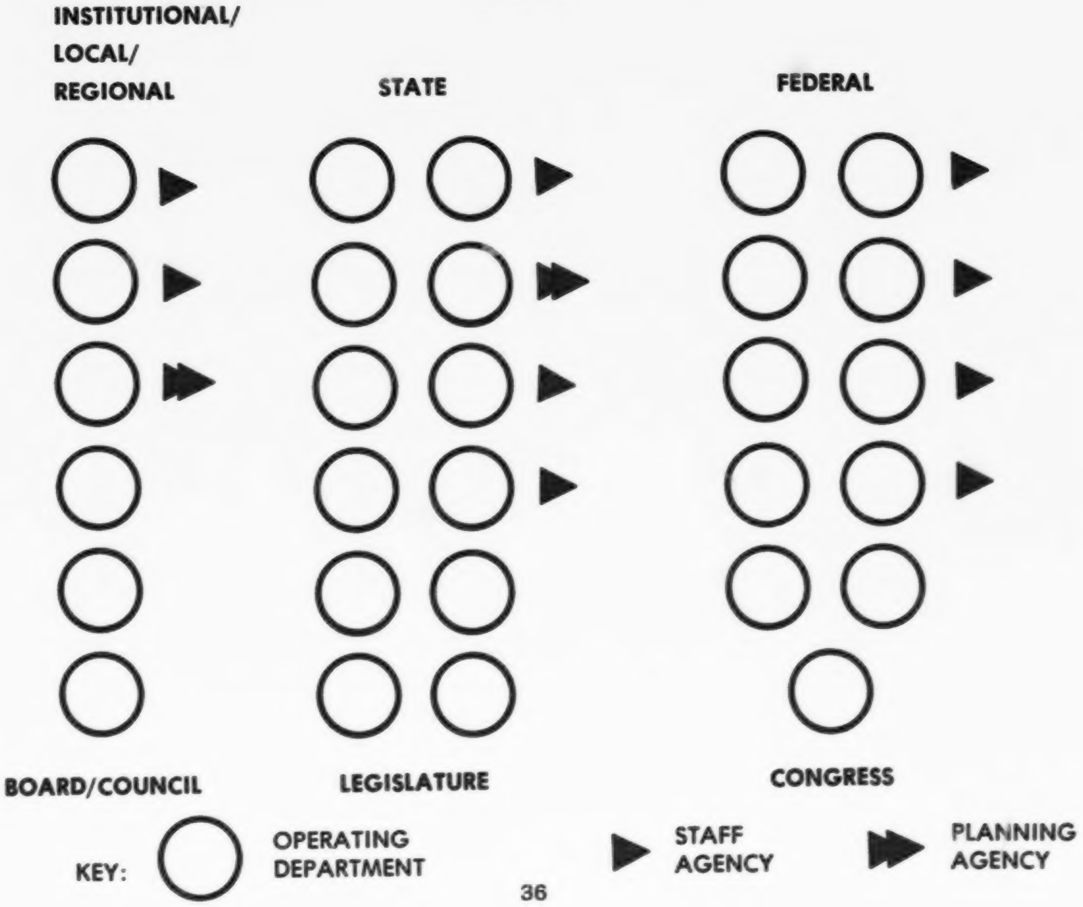
Now switch back to the state—all the state departments are engaged in planning, some of which is functional or technical. But every state agency also is or may be engaged in planning which it would consider comprehensive. There may be a state planning office near the governor and his budget bureau and other central staff agencies.

FIGURE #4

WHAT?


SPECIALIZED PLANNING
FOCI
Technique
Process
District
Clientele
Problem
Others
"COMPREHENSIVE" PLANNING

WHO?


INSTITUTIONAL/ LOCAL/ REGIONAL
STATE
FEDERAL
BOARD/COUNCIL
LEGISLATURE
CONGRESS
KEY:
OPERATING DEPARTMENT
STAFF AGENCY
PLANNING AGENCY

Finally, we get to the federal government. It too has various "operating" agencies and a number of "staff" agencies, but it has no central planning agency. Several federal agencies, however, *are* concerned with comprehensive planning, although no federal agency is specifically designated to do comprehensive planning either for the federal government or for the nation. Obviously, for example, the Office of Education is concerned with such comprehensive educational planning as may be done by state education agencies. Similarly, HUD is concerned with the comprehensive planning that is done by city and state governments.

The moral, I suggest, is that planning is ubiquitous: it is performed in all jurisdictions, and in every cottonpickin' agency or office in every cottonpickin' jurisdiction.

Let's talk a bit about the people who are called "planners." It seems to me that, basically, it makes little if any difference whether they are housed within an organizational unit called the planning office. In a place the size of the state agency of New York, it would be a surprise if they didn't have a planning office; but then, I was told once that the New York agency always has more vacancies than the South Dakota agency has positions. In South Dakota, instead of specializing and dividing labor to a point where each person does only one thing all the time, it may be that every "pro" in the small agency is obligated to do several things. In that setting, the principal "planning" officer also may be the principal "something else" officer: he could be a deputy superintendent with responsibilities of several kinds, one of which is to make damn sure there is a focus on planning. I don't care *how* that planning focus is provided organizationally. What seems quite clear is that there has to be a planning capability, planning capacity, planning component; *perhaps* it is useful to create a separate organizational unit to house that capability, but that's a less significant issue.

Perspectives on Educational Information

The kinds of information needs are suggested by the various kinds of planning. Further, the information needs, and the kinds of reports to be generated, depend on the perspective used to look at the problem. One perspective is provided by the idea of "function." It would be perfectly plausible to take the total state agency—that is, the agency as measured in amounts of work or activity or emphasis or money or on whatever other basis—and to divide it into pieces on the basis of its attention to the several different functions it performs. The sum of the functions, of course, would total to 100 percent: that is, the percentages addressed to the leadership, operational, and regulatory functions, respectively, would constitute the sum and substance of the agency's efforts or budget.

Next, we might re-examine the agency to divide the agency again in terms of the amounts of its attention to each of several problem areas; again it would add up to 100 per cent.

Similarly, the work of the state agency is aimed at various target audiences, let us say, or clienteles. Through its own operation, the agency expresses a concern for wee little kids, not so little kids, medium size kids, and big kids, and for adults and pros and so forth. It addresses attention specifically to each different clientele. If you express activity in terms of the proportion aimed at each client group, when you add the parts, they total 100 per cent. As long as you take *any* consistent perspective to slice up the agency, the total always is 100 per cent.

Maybe the point is more clear when stated in a different way. Your agency has staff doing the function called research. But there isn't any such thing as a one-dimensional "research" task. A fellow has to research *about* something *to some end*; in the education business he may research about some educational problem, as it affects some educational clientele, at some grade level or age level, and in some geographic sector. The piece of work called research is "research" only when you take a *functional* cross-section of the agency; it is something else when you start with any of the other perspectives for examining the agency.

A series (*not* alleged to comprise an exhaustive series) of perspectives is enumerated in Figure #5. Each one represents a legitimate way to look at the agency, and a proper frame of reference in terms of which to generate, capture, collect, report, and have available a lot of information.

"Programs"

The one I label "programs" is given the plural form and is in quotes, because there are many more ways than one to describe "program" and because the very word "program" has different meanings for different people. Try this example: The Governor conceivably could present to the legislature *his* executive budget expressed on a "program basis"; 100 per cent of the state budget, as he proposes it, is divided into perhaps 12 main-line "programs" of state government. None of the 12 needs to be named "education." Nevertheless, everything that the Governor expects the state education agency to do *has* to be contained in one—or in some combination—of those 12 because all activity of the state government, including its education agency, *has* to be provided for in *the* budget. Meanwhile, the state superintendent of education prepares a budget for his agency; the Chief's clientele for the moment is not the state legislature, but the state board of education. The Chief also may offer a "program structure." He may list more or fewer programs than the Governor did, but we can't argue with the validity of his program structure: if he wants to say, "We are engaged in five main-line programs, gentlemen, and these—programs 1, 2, 3, 4, and 5—embody our entire operation," that is one legitimate and proper way of viewing things; the activities of the agency have to be subject to expression in terms of that peculiar program structure. Each division head may have still other "program structures" by which to describe *their* total operations.

Substantive Views and Artifacts

What is significant about "program structures"—and about expressions of information arrayed by function, problem area, clientele, etc.—is that they are *substantive* expressions of the operation. That is, they *do* go to the guts of what the education business is about and why the state education agency is in business; hence, they suggest both *why* the agency must gather information and *what kinds* it must gather.

There are a few other bases for viewing and describing your agencies, but these are more nearly artifact than they are substance; I refer to standard expressions of information arrayed by organizational unit, revenue source, and object. "The People" did not cause your state agency to be created because they wanted it to have organizational units called divisions, bureaus, and sections. The People just couldn't care less about those artifacts of bureaucracy. They caused the agency to be put together to [illegible] something substantive. An organization-oriented breakdown of data—as a housekeeping problem—has some internal importance. The substantive arrays, however, are far more important externally, and far more significant fundamentally.

The comments about data arrayed by organizational units apply to arrays by revenue sources. A standard way of reporting what an agency does is to state how much "Title II" and each other pocket of revenue is doing; I find that a nonsubstantive descriptor, and I would so find it if I were an innocent member of the general public rather than a person moderately well informed about education.

PERSPECTIVES:

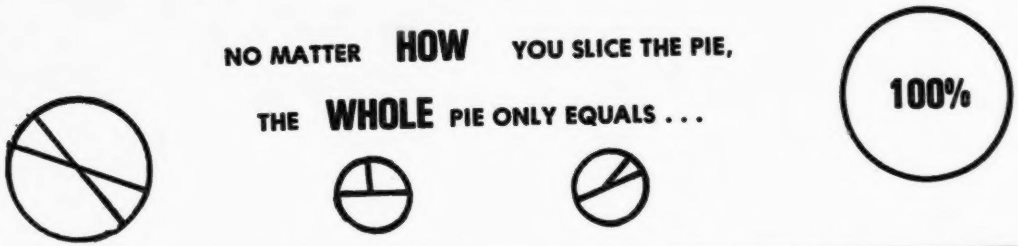
FIGURE #5

Functions
Problem Areas
Client Agencies
Target Audiences or Clienteles
Subject Matter Areas
Geographic Areas
Purposes
Age/Grade Levels
"Programs"

SUBSTANTIVE

Organizations
Revenue Sources
Objects
Activity Units ▶ Basic "Translation" Medium

ARTIFACT
(But Internally Useful)



NO MATTER **HOW** YOU SLICE THE PIE,

THE **WHOLE** PIE ONLY EQUALS . . .

FIGURE #6

1. TRANSLATE ▶ IDIOSYNCRATIC DATA ▼
GENERIC LANGUAGES
(e.g. functions, clienteles, etc.)

2. AGGREGATE ▶ ON ANY GENERIC BASIS

	A	B	C	Z	TOTAL
School District Region State Nation					
					100.0%

3. ENCOMPASS ▶ ALL OF "EDUCATION"

K-12 School + Pre-School + Community College + Adult Ed + College E University + Libraries + Job Corps +

Similarly, governmental budgets—including those for education—sort out an agency's planned and actual operations in terms of "objects of expenditure."

It is interesting—again, for housekeeping purposes—to know how much money goes into salaries, wages, travel, communications, transportation, equipment, supplies, and other major and minor objects; an accountant or an efficiency expert may worry about object analysis. It genuinely may be significant internally to a management seeking economy in operation, but it is virtually irrelevant outside the agency and outside a budget bureau.

The "Activity Unit"

Finally—referring still to Figure #5—we get down to something called "activity units." The activity unit is a basic building block for gathering information about an agency. It also is the basic medium for translating the "artifact" or "housekeeping" kinds of information into substantive kinds of information. Each separate, identifiable project or line of effort can be regarded as a separate, discrete "activity unit."

A state agency does many different things, and each agency has its own unique set. Whatever the things are that your agency does, they are *your* agency's activity units and they are idiosyncratic. They are not exactly the same collection that any other state agency or any other enterprise does, because no two agencies are identical in scope of responsibilities, scope of operations, intensity of operation, organization, geographic coverage, or in any number of other respects. They operate in different ways and they are structured in different ways.

For example, they "package" jobs in different ways, and some real creativity is expressed in the various styles of providing for specialization and a division of labor. That is, a job for a "pro" in one agency may be focused upon a particular grade level, so that the "pro" there works across the board in terms of problems or topics, but always at that grade level. A second agency would have him work across the board, but only with certain school districts. In a third agency, however, an exactly comparable fellow in a really analogous position is basically assigned to a subject matter; he always works on that subject matter but at a variety of places, problems, and grade levels.

The "packaging" of work or the assignment of duties thus varies from agency to agency. No matter what arrangement of work your agency may choose, that arrangement is *real*. Because it is real, it is possible for the agency to "keep score" separately for each one of the things it has elected to engage in. The same is true of a state education agency or a school, a college, or any other enterprise: each enterprise does some things that *it* can identify and can keep score on, in practically a cost accounting sense.

The agency can—if it wants to—learn to keep score in a way that enables it to express what it is doing (perhaps even what it is accomplishing) in terms of its own set of activity units. Activity units are *substantive*, in a basic sense, even though they are not important outside the agency. If your agency runs a research activity called Project Moonbeam, or a demonstration activity called Project Upstart, there may or may not be another activity just like it anywhere in the world; but *you* have it—it is a substantive part of your agency's work. If necessary or desirable, the agency can capture and accumulate information regarding how much staff time and effort, how much money, how much material, how much attention has been invested in each activity unit. I think it is necessary, desirable, *and* feasible.

Your agency could express that activity unit—that is, categorize it, describe it, and characterize it—as being a part of the total operation in a certain function, in a specific problem area, aimed at a particular clientele, etc. The agency also can put a price tag on it.[1] Then the agency can group all activity units on the basis of the way they have been categorized from each of these points of view.

If you did so, you would be describing the total operation of the agency on what I would regard as a "program-oriented" basis, whether in terms of functions, in terms of problem areas, or in terms of any other substantive perspective.

To do this, the agency must capture and accumulate basic information about the work of the agency, the use of agency staff time and effort, and the use of agency money. The basic information to be captured must be gathered in terms of (a) the three sets of artifacts—organizational units, revenue sources, and objects of expenditure—and (b) the activity units. The data have to be captured persistently—transaction by transaction, day by day, month by month—so at the end of a year or other period, you can know: which organizational unit spent how much staff time and how much of other kinds of resources; from what revenue resources these resources were drawn; on what objects of expenditure they were drawn; and where the moneys were invested, i.e., on which activity units.

Translation

Once you have thus generated a price tag for each activity unit, the raw information can be translated into descriptive statements based on any of the substantive perspectives. One such perspective, for example, is built into a form that you all must have seen, developed by the U. S. Office of Education, which refers to State Education Agency "Program Functions"; the form offers a six-digit code and a great many pigeonholes in which to sort out the bits and pieces of an agency's operations. Chances are that no agency has packaged its work quite the way that form has it packaged. Nevertheless, if every agency were keeping score on its own activity units, it could translate its own data into the format that the USOE proposed; the translation process would cause a little "square-peg-in-round-hole" difficulty, but not much.

Really, it takes a translation to move from "activity unit price tags" to "plain language substantive reports." No matter which way you look at the agency, it is one entity with one total of operations. You may slice the budget pie any way, but the whole pie invariably contains 100 per cent. The pie can and should be sliced, however, in each and all of the substantive ways.

People would go crazy, it is quite clear, if they tried to keep score day by day, piece of paper by piece of paper, on every one of the ways in which reports ultimately must be produced. It would be nonsense to instruct a clerk to place a whole series of code numbers on the transaction document for a $1.98 purchase, in order to indicate which organization spent it, where the money came from, what the object of expenditure was, for which activity unit, in pursuance of which function, aimed at which clientele, and on and on.

Nevertheless, if we are going to get "program-oriented information," the data about state education agency operations needs to be susceptible to being expressed in *all* of the several substantive ways. That really is the *problem* posed for a "program-oriented management information system." I think the *solution* to the problem can be found in (a) score keeping on the basis of activity units, followed by (b) translation of data into generic language on each substantive parameter.

Generic Languages

On Figure #6, the key word is "translate," because a great deal of *Idiosyncratic* one-agency data will have to be translated into generic all-agencies languages. The Title V form on "program functions" contains one generic language. A similarly generic language can be developed to identify the various target clienteles of state education agencies, and to provide for reporting the work of a state agency in terms of the effort aimed at each such client grouping. Then there must be a "purpose" language, a "subject matter" language, etc.—one for each substantive perspective.

Data regarding the agency's work must be gathered per activity unit. These data are translatable from the idiosyncratic form in which they can be collected by that agency—necessarily idiosyncratic because the agency's total mode of operation is unique—so they can be expressed in all generic languages.

Reference has been limited to the state agency only, but really the problem is considerably larger. Again, see Figure #6. Another key word is "aggregate," and I would emphasize the need to aggregate information on any generic basis. *Schools* have activities and spend money, spend staff time, spend effort, and are sources of a great wealth of related information. The same may be said of school *districts,* or of education in regions, states, and the entire nation. Now, depending on where you are planning, what you are planning, or what your role is in the education business—whether your function is planning or research or something else—you may be interested in data specifically about one school; you may be concerned about schools of a certain kind; you may be concerned about a district or cluster of districts. The state agency clearly is interested in information about *all* districts containing *all* schools within its state. To make life even more complicated, the need for information is not limited even to the school business *per se.* It also extends to the university business, and the private school business, and perhaps even the library business. It has to become possible to aggregate information. It therefore is essential that information be expressed in generic languages. Otherwise, we're still playing with apples and oranges.

Conclusion

The range of data is almost literally unlimited. But—because in the land of the blind the one-eyed man is king—any reasonable *start* at gathering the information *is* a start both at gathering information and at being king. The five sessions of last weekend—on student accounting, staff accounting, facilities accounting, instructional program accounting, and financial accounting—all were clearly pertinent, for all systems discussed will gather information about the schools as they stand.

However, those basic educational data systems will not particularly give information about what is apt to be or ought to be. A planner is certainly concerned about what *is,* what *ought* to be, and what is *apt* to be if nobody does anything about it. If the examination of "what is apt to be if nobody does anything about it" leads to an unsatisfactory, unacceptable conclusion, then the state education agency presumably is one of the outfits that might undertake to do something about it.

Having said all that, I haven't indicated *how* to collect all the required information. I think that I know how to collect program-oriented financial information, at least, about a state agency. It seems that there are several other kinds of information about which there now exists pretty decent knowledge. The discussions of last week indicate that, at least here and there, people know how to collect basic informational data, either using the MSEIP or BEDS approach or using homemade approaches. I was impressed by Mr. Stiglmeier's presentation about New York, for example; it made a lot of sense.

There was to be one more text for this sermon, but I haven't formulated this one very well: it seems just as possible, and just as proper, to spend your full time studying either one leaf or the whole forest. Let me elaborate. This morning we heard an expression of concern for the individual child. It goes without saying, it seems to me, that one fundamental reason for having an educational enterprise is profound concern about each student that goes through the enterprise. That is largely true especially in the school system. It is not the complete reason even there, however, because we have societal concerns as well as individual concerns. Certainly in higher education, there might be

FIGURE #7

SEA "FUNCTIONS"

OPERATIONAL
REGULATORY
LEADERSHIP

1. IDENTIFY	Objectives & Problems Needs & Resources Criteria & Standards
2. ANALYZE	Alternative Policies and Activities
3. DETERMINE	Resource Needs Allocation Pattern
4. APPRAISE	Effectiveness & Quality
5. STIMULATE	Research, Development, Test, Demonstration, Diffusion, Dissemination
6. MANAGE	Resources & Activities

Management Processes

1. Anticipating the Future(s)
2. Planning
3. Programming
4. Organizing
5. Budgeting
6. Financing
7. Staffing
8. Administering
9. Controlling
10. Evaluating
11. R & D "-ing"
12. Relating

Information Systems

Environmental Info
Investment Info
Outcome Info
Property Info
Educational Info
Work Measurement Info
Personnel Info
"Intelligence"

universities even if there were no students in attendance; at least that is the way they got started long, long ago.

One point that is pertinent in talking about state agencies, it seems, is that the state agency itself is in no position to look at the individual child, or "to do for" the individual child. Wherever our hearts lie, and however much we may believe that the child is the focus of concern, it is essentially outside the power of the state agency to work with the child directly. The state agency has to work on some things that get down—or get up or get over—to him indirectly.

I think Don Leu suggested this notion the other day: a planner could spend his full time, for a long time, designing one school house; an equally competent, equally intelligent, equally farsighted planner could spend the same kind of time and effort planning school houses for a whole school district or the school houses for an entire state system.

Now—pardon me if the analogy is too labored—one planner studies a forest, another looks at a tree, and a third zeroes in on a leaf.

The state agency planner, it seems to me, is constrained to look at the forest first. Somewhere along the line, perhaps he may get to the point where it becomes convenient, necessary, or useful to enter into a little more detail. But, first things first.

During these few days of Institute proceedings, I have taken some notes on what state educational planning is *not*. I conclude that: it is *not* data processing, *not* an information system, *not* a communications network, *not* coordination or control or PPBS or PP & E or management or reporting, nor publication of a plan, nor advocacy of a plan, nor research, nor local district planning, nor technical assistance to school districts on planning. As I said at the outset, I haven't seen a really good definition of planning, and I certainly haven't seen a satisfactory definition of planning for a state education department. But it seems clear that educational planning is not coterminus with any one of the things just enumerated, even though it impinges upon every last one of them.

I submit, therefore, that your agency's planning needs appropriate "program-oriented management information systems." Although such systems will not guarantee that planning will occur, without them planning will be of doubtful merit. Planning plus programming plus budgeting equal very little without reliable program-oriented information.

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[1] To do this, the agency can maintain a set of "program-oriented" accounts, in which each activity unit is represented as a cost center; i.e., a core around which to accumulate direct or indirect items of expense attributable to it. Of course, an activity unit also is a core about which to accumulate nonfinancial varieties of information.

PLANNING AND POLITICS

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The purpose of this paper is to provide a framework for a discussion concerning the impact of political and social phenomena on planning in state education agencies. Comprehensive statewide educational planning by state education agencies is not something that occurs all by itself. It must take into account many factors. Among the important factors that should be considered in state education agency planning are (1) the general political and sociological framework of the state and nation; (2) the role of the state education agency as it relates to other state governmental agencies such as a department of administration or finance; (3) the agency's own internal politics (this includes interpersonal and intraorganizational political situations); and (4) the general trend in the change of value systems taking place in the state and in the nation. Each of the general areas just mentioned is a broad area of concern, and its implications are far reaching. Our understanding of the foregoing in detail is essential, and each of these areas must not go unattended if one is to generate a viable educational plan that will affect the persistent and compelling problems facing society. We should also be aware that it is impossible to generalize about a political situation. One might, however, order a variety of individual situations into general classes of types of political problems. Each state and each locality has its own peculiar political milieu. It is also very important to know that when a planner does particularly creative and inventive planning, he is often proposing ideas that are new to the communities involved, and it is no surprise that these new ideas will often be resisted. This resistance is often generated if the planner creates a program patterned after what has happened elsewhere no matter how effectively it worked in the previous situation. Each planner should make sure that he takes into account the peculiar and personal aspects of his own individual situation from a political and sociological standpoint. Eugene Rostow in his excellent book *Planning for Freedom*[1] made a very penetrating statement when he said, "While ideas can and do migrate from one social environment to another, no social institutions can be transplanted as such. They always exist in a matrix of customs, habits, and ideas which make them also as local as wines." The state planner must be well aware of the local nature of his planning problem because the political nature of the planning problem is in all probability as great if not greater than the solution to the more technical problems such as the development of the adequate management information system. Since it is clear that planning never takes place in a vacuum and that this is true for any type of agency, it seems apparent that good planning must take cognizance of the total situation. It must deal with the "gestalt." In a review of the political impact on planning as it relates to state education agencies, it is clear that the planner must establish a very thorough knowledge of his own agency and its clientele. The political considerations to be taken into account are determined by assessing the political environment as described in the four general areas alluded to followed by an examination of the internal and external components of the political structure. Usually when thinking of politics one takes into account only those *external* political factors such as the goals and aspirations of competing interest groups outside the SEA. Some evident external political forces that are readily apparent are: (1) legislators, (2) lobbyists, (3) political parties, (4) major professional associations. Among the major professional associations are such organizations as the National Education Association and the American Federation of Teachers. Also to be reckoned with are unions and special interest groups of students and adults. In addition to these formally organized special interest oriented organizations, one must look at other special interest groups that are not formally organized. Representative groups in this category are urban people, rural people, and blue-collar people. In general, each group has its own value orientation and seems to believe that the particular values that it holds are the values that are "good."

However, even though one must acknowledge all of these organized and unorganized groups, you cannot eliminate from the most primary consideration, the internal politics of your own shop. The internal political factors include the personal characteristics of the people who will determine policy in your state education agency and they should include the attitudes and the values held in general by those who are professionals within your own organization.

The planner is one who poses alternatives; he is not a final decision-maker. As such he influences decisions to be sure, but he does this through a careful appraisal of the possible alternative courses of action. The chief state school officer and/or his designate will make the final agency decision that will than be recommended to the political decision-makers in the legislature and the ultimate course of action will depend as always on appropriations, the political climate, etc.

The determination as to whether or not it is wise to establish a permanent program planning and evaluation unit in the state education agency is in itself a political decision. To be effective an organization must take the time to do the necessary planning, to establish appropriate goals, to analyze alternative courses of action and to develop a proper management information system. All this is done with due knowledge of and respect for the local sociological and political situation. One could liken this approach to an intelligence system so that the SEA will be able to deal with most problems before they occur rather than constantly responding to problems in a crisis fashion. In a conservative area, politically, it may be possible for a SEA to establish a permanent planning and evaluation unit, but it might be politically wise not to talk about planning as being a major function of the state agency. In fact, it might be that you would want to talk about it as an evaluation group and not to mention the word "planning" as it has a semantic connotation that is "bad" and in some cases it is as provocative as the word "bureaucracy." Now, I realize that all of you present are well aware that there is nothing "good" or "bad" about a bureaucracy because this is only a type of organizational structure that has particular characteristics. Each of you, if you have not had the privilege up to this point, should read the book *The Administrative State* by Fritz Morstein Marx.[2] This book was published by The University of Chicago Press and is one of the more succinct and intelligible presentations that gives one insight into the whole structure of bureaucracy. In addition, the book allows you to see general classifications of bureaucracy and you will find that bureaucratic structures themselves have a personality. They might be of the "patronage" type in which the elected political people are able to give out jobs to their supporters in the bureaucratic structure. On the other hand, it could be a "merit" bureaucracy with close controls as to who enters such as the Indian Civil Service or the Pakistani Civil Service or it could be another type of bureaucracy such as the "Caste" bureaucracy. It is useful to understand these distinctions and be aware of the nature of your own organization. It seems readily apparent that a thorough understanding of the sociology of your own situation is necessary if one is to create a viable planning atmosphere. For further reading in this area, let me refer you to the work of Charles Loomis on Social Systems. His work is very detailed and deals with the nature of the educational as well as other social systems. If you become interested in the nature of social systems and their relationship to political and sociological forces that are affecting your planning, I recommend the book *Modern Social Theories*[3] which is a collection of modern social system theories as digested by Dr. Charles Loomis. Dr. Loomis also had a book published in 1957 entitled *Social Systems*.[4] I would suggest that this is first-rate reading material and that it would be worth your time to examine these books if you are going to proceed along the sociological analysis line of inquiry.

In assessing the general political and sociological milieu of the state and national political situation and its implications for planning one has to look carefully at which parties are in power and what their stated platforms are. It seems quite clear as well that one should be readily able to discriminate between "real" goals and "stated" goals. By "real" goals, we refer to the real motives behind the decision to establish a certain goal or priority and by "stated" goals I mean those kinds of reasons given by the agency publicly as to why they are taking a particular action. It seems clear that one should be very well aware of the statements in the political platforms and the statements made by political types in Washington and in the state capitol regarding the general needs of society. An attempt should then be made to evaluate what the "real" goals are for these political types as they adopt a certain program, procedure or practice.

When one talks about the agency's relationship to other state political and governmental factors, one should be aware that the state education agency ordinarily finds itself as part of a greater bureaucracy called state government and it is within this context that the state education agency must work. The state may or may not have a structure that places a fiscal department in charge of all budget matters for all the state departments. For example, in the State of Minnesota there is a department of administration and the appropriations go to the department of administration and checks are processed by the central service units of the department of administration and the employees of the state education agency are civil service employees. These administrative relationships place different kinds of constraints on the planner, and he must take into account the very nature of his own organization's fiscal affairs and roadblocks if he is to make decisions that will be meaningful and will be possible to implement without a need for major legislative revision. As we all know, it is very difficult to get legislative revision even for sound programs, and it is apparent that if a planner develops plans that do not take into account the political situation and require major legislation, he can become very ineffective even though he has an excellent plan otherwise.

The next area that the planner must examine is the agency's own internal personal and organizational policies. This again reduces to a problem of "real" goals and "stated" goals. It also revolves around values and the sociological and psychological importance ascribed to one priority over another and, of course, the age old problem of empire building. In each state education agency there are vestiges of the past as well as new and progressive elements. Just because someone has been in a state agency for a long time, does not mean that he is a vestige of the past. The old timer might be the most progressive thinker in the shop. It may be, however, that an old timer has been conditioned to work in such a way that he feels that most things are not possible. A fresh look at the situation may reveal changes to be not only possible but desirable in the light of the changes that have taken place in the last 30 years in education and in life in general. It seems readily recognizable that the internal politics of an agency can submarine a planner's proposed course of action or even all of the courses of action that are proposed by the planner if he is not aware of whose "toes" he is stepping on and what the internal dynamics are of the situation. The recent flood of Federal funds, the raising of salaries, the expansion of services and, thereby, expansion of numbers of people in state education agencies utilizing federal funds, has changed the nature of the game, and it is necessary for us to realize that the rules of the game are also being changed. The planner must take inventory of who in the agency are the strong people in the informal structure, and then he must also realize what are the agency's "stated" goals and what are the agency's "real" goals. It seems quite apparent that if the planner is to be successful, he will formulate alternatives that are consistent with the "real" goals of the organization internally; otherwise they will never get out of his own shop. It may be that by clever and inventive planning the planner will be able to achieve what ought to be. He may lay out courses of action that can achieve what ought to be while taking into account the "real" goals held by the people in the organization and the goals of the organization itself. If the planner is very inventive, these courses of action will be consistent with a reasonable and rational "stated" goal for intergovernmental and intragovernmental consumption.

The problem that is the most difficult to overcome, in the view of this observer, is the dynamic nature of the value system in the United States. The rapid change of values is due in part to our free society and to the constant technological changes that are occurring. We constantly update what we consider good or useful or reasonable. There is no question that those kind of things that are valued today will be under attack in future generations, and if the planner is to be effective, he must be cognizant of the changing value structure and the general trend of value orientation. Therefore, when a planner develops a program that is consistent with the "real" goals today, he will also have built into it a dynamic evaluative research element that will allow a continuous assessment of the changing "real" goals internal and external to the SEA. It is only when the "real" goals are taken into account that one is able to be effective in an endeavor called "political analysis."

We also deny ourselves a proper perspective when we look at the nature of the educational system of the state and term it a professional problem and are not aware of the broad political implications for such an activity that spends literally millions and millions of dollars each year. Probably the largest organization in any of the states in terms of total expenditures and in terms of impact would be the local and state educational system. It is not just a professional game in which we look at the better alternatives and make choices as to priority. Any time you attempt to put a dollar value on anything and to assess priorities and to maintain a position, you begin to step on "toes" and when we hear the saying "put your money where your mouth is," it is quite clear that this is a very political kind of concern as it affects the pocketbooks of each taxpayer in the state. The planner must be aware that real goals tend to evidence themselves more rapidly in situations where money is involved than in situations where curricula are involved. The internal politics or the internal framework of the state education agency is not just an ordinary political situation, but it is a situation that has the earmarks of the "bureaucratic politic." Let me explain what I mean by a "bureaucratic politic." Bureaucrats in major organizations will spend much of their time "jockeying" for position and attempting to assess the way the "wind is blowing" in higher circles. They also survey other outside political circles and they tend to develop a climate within the organization of mistrust. These old line bureaucrats are masters in withholding information to make their own particular position more defensible and to make their own opinion more valuable because they are the only ones who possess the information required for a certain area of concern. Now obviously this isn't true of all bureaucrats and it is not true in all situations, but it is generally true that in large organizations this kind of political gyration takes place. It is up to the planner to understand the nature of this problem and to propose reorganizational patterns that will, as much as possible, eliminate the need for this kind of internal handicraft and political "shenanigans." In some state agencies your chief state school officer is appointed by a board and the board is elected and in other agencies the governor will appoint the chief state school officers and in other states the chief state school officer is an elective position itself. In any event, once the man has assumed the office as chief state school officer he finds himself in the same kind of situation as all other CSSO's. It really makes very little difference whether he was elected or not elected as his appointment is still conditional upon the "legitimacy" that he has with his clientele. The legitimacy is whether or not what he says is accepted and whether or not there is high value placed on the opinion of the chief state school officer by those people who count, namely, the legislators and the general population. Therefore, it seems clear that the kind of assessment that is done constantly by a chief state school officer who is elected and considers himself political is the same kind of assessment that should be done by the chief state school officer who is not elected as they both have the same clientele. It is apparent and it is necessary that planners should definitely be aware and protect where possible the political life of the man who is in charge. There is no question but that each agency must develop within it a kind of strategy building situation that will allow the development of programs that will allow the chief state school officer and those who are in the power positions in education in the state to look good. If they look good and if the educational situation is adequately planned, great progress can take place. The planning should take into account all the necessary factors. Planning should consider what "is" and what "ought to be." Planning should assess "real" goals and "stated" goals. The adopted plan should proceed on the basis of what is the most viable alternative. If all these factors are considered, a successful plan can be implemented and become a viable part of the improvement of education in this country over the next 50 to 100 years.

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QUALITY RURAL EDUCATION: A DILEMMA—A NECESSITY

Arnold Gallegos, Associate Dean, Graduate School
Washington State University, Pullman, Washington

Dr. Arnold M. Gallegos has been a director of a Title III project, "High School for One," which was designed to develop total, multi-media, self-instructional systems for rural schools. He is also chairman of the State Advisory Council for Title III projects for the State of Washington. Dr. Gallegos, who received his doctors degree from the University of California, Los Angeles, was a high school teacher and a professor of education before assuming his duties as acting associate dean of the Graduate School at Washington State University, Pullman.

An Overview of Conditions in Rural Areas

The majority of the citizenry of the United States is not aware of the problem of rural poverty. Few realize that it affects approximately 14 million people. In fact, rural poverty is so widespread and acute, that its consequences have swept into our cities. Urban riots in part had their root in rural poverty. A high proportion of the people living in crowded slums today came from our rural slums.

The fourteen million rural poor would even be larger if so many of them had not moved to the city for a job or a decent place to live. They have exchanged a place in rural slums for city slums and find the city slum conditions better.

The following statements are summarized from a recent study of rural America and give some idea of the conditions which must be faced in any attempt to improve education in rural areas:

A. Three million rural people are classified as illiterates (5th grade or less), attesting to the quality of rural education in general.

B. There has been little redesign of outdated rural educational programs to meet the needs of modern society.

C. If we accept an income of $3000 or under as the poverty category, 14 million people living in rural America are identified as being affected by poverty. Eleven million are white. Of the 14 million, 70% have incomes under $2000; 25% less than $1000.

D. Most of the rural poor do *not* live on farms, but in open areas, villages and small towns.

E. One out of every thirteen homes in rural America is classified as unfit to inhabit.

F. Public services are generally inadequate for rural areas.

G. Economically, the rural areas are outside the market. Their growth is not commensurate with growth in general.

H. In metropolitan areas 1-8 poor
In suburban areas 1-15 poor
In rural areas 1-4 poor

I. 40% of our poor live in rural areas
30% of our population lives in rural areas

J. Rural areas contain 80% of our school districts
Rural areas contain 20% of our school population

K. Transportation patterns have changed resulting in the abandonment of rural railroad service, the construction of by-passing, urban-connecting highways, the development of urban oriented air service.

L. The decrease of industry and related job opportunities along with medical, cultural, social and religious services in sparsely settled areas.

A Summary of Rural Problems

Rural adults and youth are the product of an educational system that has historically short-changed rural people. The extent to which rural people have been denied equality of educational opportunity is evident from both the products of the educational system and the resources that go into the system. On both counts, the quality of rural education ranks low.

There are some basic problems that have grown out of conditions in rural areas that need to be considered in a state plan for allocating educational resources. These include:

A. Irrelevant and Limited Curricular Offerings

Curriculum design geared for urban children and organizational patterns for large systems of education often do not meet the needs of small isolated clusters of schools and their students. Since the needs of rural students are not being met, their dropout rate is higher. More than 2.3 million rural youth age 14 to 24 dropped out of school before graduating in 1960.

Most rural schools do not have the facilities or personnel necessary to offer students the broad spectrum of learning opportunities necessary to prepare them to cope with the flood of knowledge, the acceleration of change and the implosion of human relationships they encounter upon moving to urban areas. In fact, most rural schools offer between one-fourth and one-third the number of courses available in urban comprehensive high schools.

B. Emphasis on Urban Educational Innovations

The implementation of communication systems in education is city oriented and poor or impossible radio and television reception and a shortage of telephone lines hinder technological progress in rural education.

The design emphasis of school plant focusing on "bigness" hinders effective implementation of programs geared for small isolated schools. Efforts at redesigning the one room rural school facility have been limited, even though there are 12 thousand of these schools still operating.

C. Unrealistic State Support

As wage earners migrate to urban areas, they affect the financial tax base of rural schools. Equalization factors of many states do not include consideration of the increased per pupil cost of operating the small, but often necessary, rural school. As a result rural areas have not been able to compete with cities in attracting and holding specialized professional personnel.

D. The Rural Rejection Syndrome

Parochialism of many rural areas inhibits the use of specialized personnel by outside agencies concerned with improvement programs. Many small school administrators and board members are suspicious of state and federal overtures of assistance.

E. The Low Level Aspirations of Rural Youth

In general there are proportionately twice as many urban students as rural students enrolled in colleges. There is a lack of awareness of the need for continuing education in modern society by rural families, rural educators and rural community leaders. The prospects of sending their children to more urbanized centers to face the barriers of peer group acceptance and the necessity of living away from home in strange surroundings appear to lower aspiration levels and contribute to the difficulty of attaining competitive educational status.

F. The Laissez Faire Attitude of State Departments

The move toward consolidation of school districts within the states has inadvertently created a lame-duck attitude toward rural schools. The belief by many that small school districts would eventually be eliminated has resulted in a "hands off" approach by State Department personnel. The crime has not been one of "commission" as much as that of "omission." Since many regional supervisors feel that additional monies shouldn't be put into districts they assume will be done away with, they've ignored these districts in over-all, long-range educational planning and, in fact, some supervisors don't even know where some of these schools under their jurisdiction are located.

G. Professional Staff Limitations

A large percentage of rural school teachers have not completed professional certification requirements and are employed on a permanent-provisional basis. This lack of training plus assignments requiring rural teachers to teach six or seven subjects for which they are ill-prepared along with low salaries all contribute to an extremely high teacher turnover and teacher shortage problem in rural schools.

Higher level training for students in mathematics, foreign languages, science, etc., is often dependent on whether or not a teacher feels qualified enough to tackle such courses.

H. Consolidation

Though most agree that consolidation of small districts into larger, more efficient and effective ones is desirous, it must be recognized that this is not possible in all cases because of geographic distance and climatic conditions in winter months.

Some Suggestions for State Planning

No state with an identifiable rural population can develop a sound plan for the improvement of education now and in the future without a realistic assessment of extant conditions in rural schools. This will result in the realization, I believe, that some rural schools cannot realistically be consolidated at this time or in the near future and must be considered an equal partner in contributing to the education of the state's youth.

A State plan could identify and categorize rural schools in relation to the curriculum considered desirable for rural youth. Once this curriculum is identified, decisions can be made in relation to the most effective and efficient means of providing it. "Effectiveness" in this construct refers to the capability of mediating change in learner behavior and "efficiency" relates to time-cost factors.

This would result, I am sure, in a more realistic identification of districts to be consolidated and a sound program for improving rural education.

I see three possibilities:

A. Small schools having no reason for being other than a historical accident which should and can be eliminated and the school population consolidated with that of larger schools with no loss of student time or additional cost to the state.

B. Rural schools relatively distant from urban areas that can be "effectively" and "efficiently" eliminated and the school population consolidated with that of larger schools if innovative and special services are provided students to make up for loss of student time traveling to and from school. These innovative practices might include specially built buses that provide regularly scheduled learning opportunities such as taped lessons with accompanying filmstrip viewers, specially designed seats (e.g., airlines) to provide work space, individualized learning packets checked in and out by student monitors, etc.

Also, special services could be provided these learners from relatively distant areas such as late buses to allow for participation in extra-curricular activities, book mobiles that can be stationed at strategic places in rural areas each evening to provide necessary library facilities, etc.

C. Rural schools that cannot be consolidated because of geographic location and/or winter weather conditions. The problems here are gigantic, but states can provide "effective" and "efficient" learning opportunities for youth through careful planning.

With recent developments in educational technology it is now becoming possible to "bring the mountain to Mohammed." Such developments as multi-media, self-instructional systems, computerized instruction, ETV, blackboards by wire, etc., can expand, upgrade and provide stability to small but necessary rural schools. The state need but make a commitment to provide it.

There are many problems relating to relevancy of curriculum and community involvement for effective change on which I haven't touched because of time limitations. Suffice it to say that success in ameliorating the "rejection syndrome" of rural inhabitants will require that every effort be made to have our rural citizens participate in diagnostic efforts which lead them to agree on the basic problem, to feel its importance and to see the resultant change as reducing rather than increasing their present burdens.

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LOCAL PROGRAM PLANNERS: THEIR PREPARATION AND FUNCTION

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Dr. Paul G. Orr who is Associate Dean of the College of Education, University of Alabama, has been extensively involved in researching school organizations, students and parents in Latin America and his home state of Alabama. He has served as superintendent of schools in Colombia, South America for the Standard Oil Company of New York and the American School Foundation of Monterrey, Mexico. He is a member of the Committee on Latin American Relations for the Southern Association of Colleges and Schools. He served for a time as a professor of Education Administration and has been working in close conjunction with the SEA in the state of Alabama. Dr. Orr received his doctors degree in education administration, Latin American history, and curriculum development from Michigan State University.

I am delighted to have this opportunity to discuss with you several points which I believe to be highly significant in the area of techniques and goals of planning—the main emphasis of this General Session of the NDEA Institute for State Educational Planners.

In reviewing the total area of planning, one of many voids which is obvious is the dearth of local program planners. In order to treat this complex subject in some type of a meaningful framework, I will present to you the major dimensions of a plan which is being implemented by the University of Alabama in cooperation with the Alabama State Department of Education. If developments proceed as planned, many of you may have interest in the program. In any case, and as a minimum, the plan may serve to help you to generate cooperative arrangements in your states or regions.

The Need For Educational Planners

To attain the lowest per pupil expenditure in the United States during 1967-1968, the State of Alabama devoted a higher proportion of income to education than the rest of the nation. The nation as a whole expended $216.00 more per child than did Alabama ($619 U.S. and $403 Alabama) and the difference between Alabama and the Southeastern Region was $81.00. This results from a combination of several factors: a generally low income, which requires a higher percentage expenditure for education while still producing inadequate educational resources; a higher birth rate and a higher proportion of young children which means more children per productive earner; and a larger percentage of children of the total school age population in public schools as a result of a smaller Catholic population and fewer parochial schools.

Equitable education does not exist in Alabama, however, as the distribution of resources to support education is uneven. The real cost of the dual school system of the past—and for many practical purposes, of the present—is difficult to calculate; however the cost in manpower from intellectually impoverished Negro and white schools that have not been able to educate children commensurate with the total economic input is a cost *per se*. Alabama, as most parts of the nation, is confronted with a state system of schools which does not perform adequately for a large part of its pupil population. The primary difference is one of degree and scope rather than exclusiveness. Alabama approaches being a microcosm of educational deprivation; hence many of its problems are reflected in school systems throughout the nation and the world. They may best be described generally by *rural* and *urban* divisions:

Rural

The rural population in Alabama presents all the classic correlates of poverty and deprivation: rate of illiteracy, level of education, number of institutions of higher education, production and consumption of goods and services, and *per capita* income. Vast portions of Alabama are underdeveloped areas.

Low farm and rural non-farm income is reflected in a low financial level of school support. A level of school support, lower than in the urban areas, is reflected in low teacher salaries and less qualified teachers, the lack of supervisory staff and the diffusion of new curricula and methods, the absence of special programs for the exceptional child and auxiliary school services, and minimal school facilities to house a minimal education program. Rural school districts and schools generally have a pupil average daily attendance well below standards recommended for efficient school operation and comprehensive quality programs. Rural schools consequently have a high dropout rate and fewer graduates enter college. The small rural school and small rural district thus tend to perpetuate rather than reduce inequalities. With few exceptions, rural children in the region are reared in a culturally deprived environment and attend educationally inadequate schools. The educationally deprived rural child has learning deficits similar to the educationally deprived urban child. He is a poor reader, has difficulty with formal language, lacks school know-how, and scores low on standardized tests of achievement. The need for compensatory education to reduce educational deprivation is just as pronounced as for the urban disadvantaged.

Urban

There will be continued growth of the metropolitan areas, and as growth continues, the problems of urban areas will be increasingly manifest in the problems of education.

Problems of economic and social stratification are readily visible in these schools. There is considerable spill-over and manifestation of the aspects (dual and rural) of educational deprivation into the inner-school areas as the masses of the poorer and uneducated whites and Negroes are expelled by the agricultural mechanization and technological development from rural areas. Imbalances in the inner-city population exist with higher percentages of minorities. There is a greater degree of mobility, higher unemployment rate, lower family income, poorer housing, and in general the population must exist on a much lower standard of living than that enjoyed by the population as a whole. Inner-city schools have low pupil achievement, higher dropout rates, fewer graduates attending college or receiving post-high school training, lower pupil average daily attendance, older and poorer school facilities, and often a less experienced and less prepared faculty.

Conclusive evidence is available that local educational systems are understaffed to cope with the problems inherent in educational planning. Furthermore most current preparation programs do not prepare future educational leaders for the task.

Introduction

SEVEN FACTS
THE COMPELLING NEED FOR LOCAL PROGRAM PLANNERS FOR LEA'S

1. Concerted effort is impossible without LEA capacity.
2. There is not enough money for all the education needed.
3. There are accepted priority populations.
4. We do not know what programs are most effective with what kinds of children.
5. Few LEA's have developed master educational plans.
6. Educational planning is fragmented from other planning areas.
7. We can do a better job than we have yet done.

There are seven facts which demonstrate the compelling need for local program planners:

1. Combinations of resources from local, state, and federal levels are available for a frontal assault on many educational problems; planning capacity is being developed at the federal and state levels but no concerted effort is possible or feasible until local program planners are available to complete that linkage trilogy needed to affect education at the classroom level.

2. There is not enough money to have all the education or mount all of the educational programs we want for everyone and there probably will not be until the cycle of poverty, poor schooling, low productivity and low income is broken.

3. Planning and categorical aid at all levels demonstrate that there are accepted priority populations for whom quality programs need to be defined and designed, strategies developed to implement them, and after implementation, monitored, evaluated, and cost-benefited.

4. Financial decision makers at all levels of government need to know (a) what programs are most effective with what kind of children, (b) how much resources, by source, flow to each program, and (c) based on cost-benefit, how to direct available resources to programs that work best.

5. Capacity for educational planning is severely limited and few LEA's have developed master educational plans; most which have been developed are: (a) incomplete, because they focus only on pupil location, plant surveys, and population and finance projections as a basis for building plans, or (b) irrelevant because they were developed for a school system or pupil population which no longer exists, such as for a dual system (segregation) or a socio-economic class (*de facto* segregation), and/or (c) fragmented from the social and political context of society, and/or (d) incredible because they were developed by personnel trained in isolation from the situation, such as programs conducted exclusively on a university campus, and/or (e) unworkable because they are based on attempts to transfer solutions from one area to another irrespective of local conditions such as the level of training of the faculty, the exact nature of the problem, and the propensity to change.

6. Most problems of urban and rural populations and the comprehensive planning needed to treat them pervade educational planning; most educational personnel who perform the planning function, however, have not received a multidisciplinary preparation program designed to prepare them to function effectively in the broad context of societal problems, which, by their nature, are interdisciplinary.

7. Even though more is to be learned than is presently known about content areas

for educational planners, there are identifiable skills which, when subjected to interaction analysis, will provide information needed to cost-benefit programs which are designed for priority populations: demographic information to provide a planning base; output information concerning achievement, attitudes, vocational skills, consumer habits, health and health practices, and related areas; program effectiveness; participation in programs which are designed and implemented; and cost. In addition to these skills, behavioral requirements for local program planners may more closely approximate those of the behavioral scientist—particularly detachment and objectivity—than those of the teacher or school administrator; however, the requirements need fuller definition or re-definition through research as programs proceed on presently defined definitions.

The seven needs hereinabove identified are believed to represent the most important elements of what is known at this point in time concerning educational planning. Unquestionably, programs for the preparation of educational planners at the local level will require a development period for no such programs exist at the present time, and in the United States there are only two known local systems with planning staffs. The University of Alabama program is organized to develop the major dimensions of the best possible program through a process which in 1968-69 will involve Alabama (this stage is already operational on a pilot basis and is funded at approximately $210,000), in 1969-70 will become fully operational in Alabama and selected LEA's in the region, in 1970-71 will include the Appalachian Region, and in 1971-72 will include a nationwide program for local program planners who have local needs for similarly constituted priority populations of educationally deprived children and adults. The general introduction has briefly outlined the need for local program planners and the projected timetable.

Objectives

The primary objective of programs for local educational agency planners should be to prepare them to manage and develop a permanent planning and evaluation component in the LEA in which they are employed. This will make possible two elements presently lacking in planning: (1) the genesis of systemic linkage of local managerial skills to state, regional and national planning and evaluation components, and (2) the creation of a local function which makes feasible concerted attainment of target and priority goals resulting from local, state-wide and higher level comprehensive planning; that is, planners functioning at each critical political level within a framework which induces input-output, communication vehicles, and fosters interactional analysis of each program element at each level.

The University of Alabama plans to develop a Center for the Preparation of Local Program Planners during the period 1968-72. The program is designed to prepare personnel in local program design and planning. It is a result of cooperative planning by the University of Alabama, the Alabama State Department of Education and the Appalachian Regional Council. The program will develop in four major phases:

I. 1968-69: A pilot Project in which the University and the Alabama State Department of Education will: (1) assess the needs of the state, (2) develop new materials and approaches to local program design and planning, (3) develop model systems. This phase is operational and the Alabama SEA has agreed to provide approximately $210,000 to this part of the program. Fourteen clinic interns are involved.

II. 1969-70: An operational project to apply the system developed in Phase I to a program for preparing 15-20 program planners for LEA's in Alabama.

III. 1970-71: A continuation of Phase II expanded to include LEA's the Appalachian Region and 20-30 clinic interns.
IV. 1971-72: Full development of a Center for the Preparation of Local Program Planners with participation from selected LEA's on a nationwide basis. Thirty to forty clinic interns will be involved in the program.

Program Organization and Content

FRAME I

REQUIREMENTS FOR PREPARATION

MULTIDISCIPLINARY

BASED IN PRACTICE

DIRECT AND CONTINUING CONTACT WITH
BEHAVIORAL SCIENCES

KNOWLEDGE OF MULTIPLE PLANNING FIELDS

SKILLS DEVELOPMENT

Technical

Political

Administrative

Local Program Planners (LPP) should be trained in a manner consistent with five major requirements implicit in the needs and objectives as stated previously. (See Frame 1.)

REQUIREMENTS FOR PREPARATION

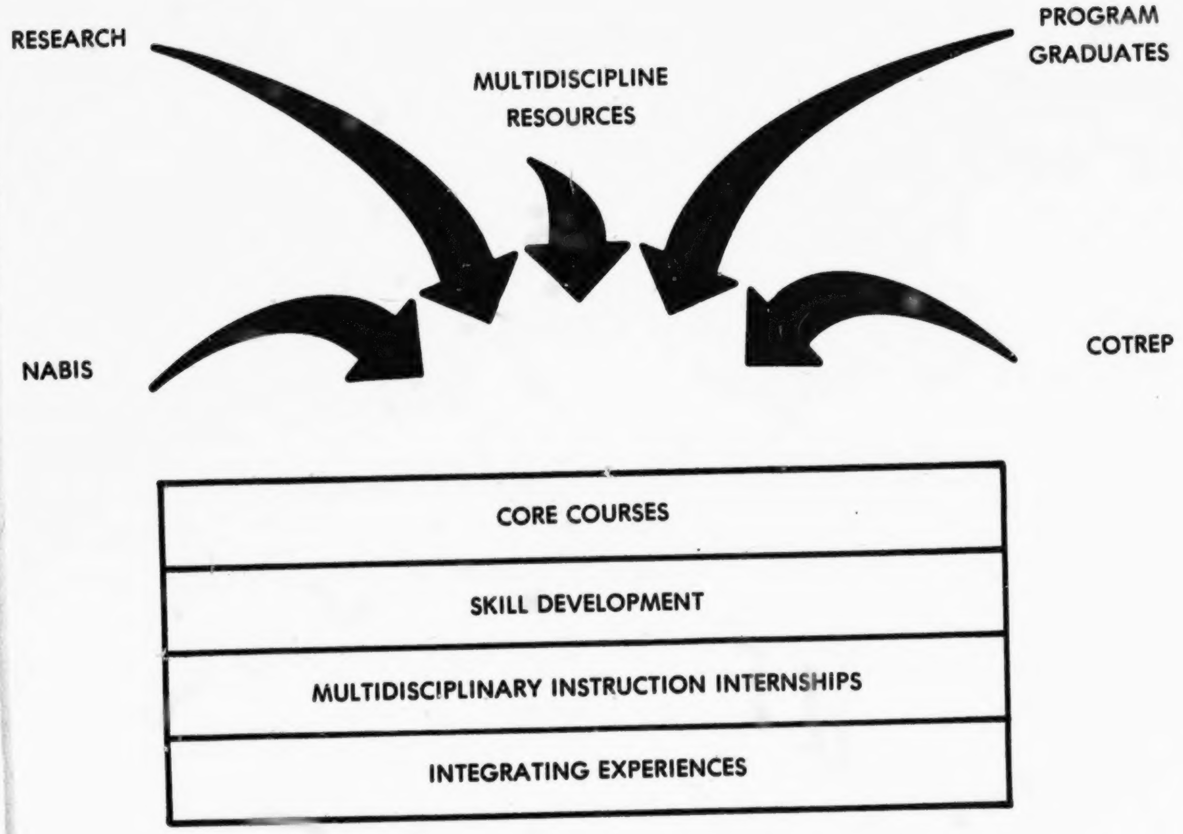
1. Multidisciplinary
2. Based in practice (clinic): combining work and study
3. Direct and continuing contact with behavioral sciences (skills and attitudes)
4. Common core of planning information in multiple planning fields
5. Skills development
   a. Technical
   b. Political
   c. Administrative

A unique new preparation program is required to meet the need for educational planners with capabilities in the five suggested areas. Such a program, in order to accomplish the job, must have program input from all of the information pertinent to successful planning, and do so in such a way that this knowledge can be employed in an effective and useful manner. Not only must the program utilize multidisciplinary knowledge, but it must also achieve a clear relationship to reality and practicality. (See Frame 2.)

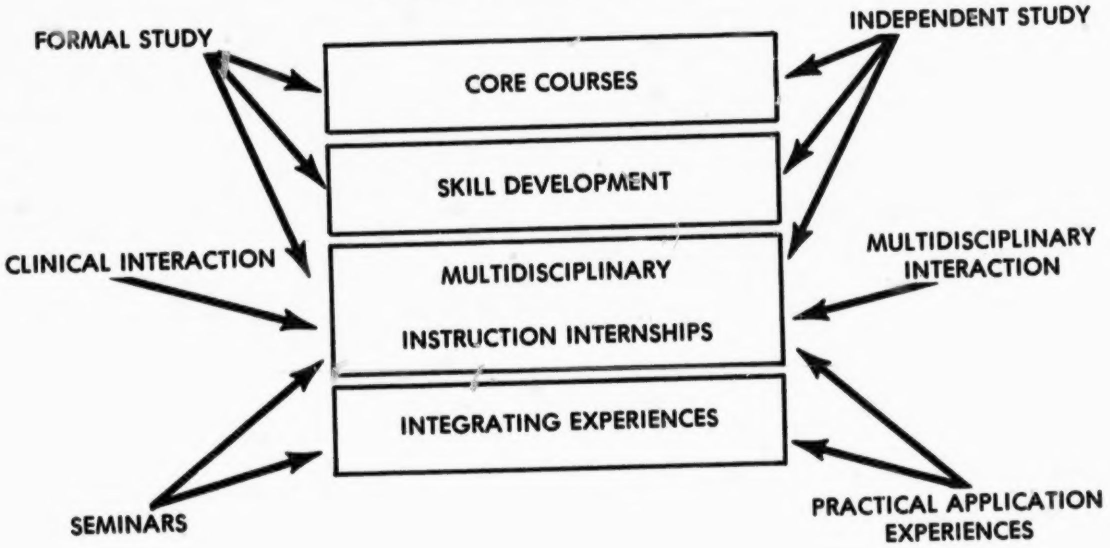
To make the training experience as meaningful as possible, this new program will be clinically oriented throughout. In addition, participants in the program will be those who presently have responsibilities in the educational planning field, or who will be engaged in some phase of educational planning.

Credibility is a critical aspect of such a program. To satisfy the program requirements and to assure that the project remains directly related to both the latest appropriate knowledge and required skills, multiple program inputs are planned. The program will support a research base into the behavorial needs of local program planners with the goal of providing clarification and redefinition of the requirements the program should meet.

FRAME 2
PROGRAM INPUTS


RESEARCH
MULTIDISCIPLINE RESOURCES
PROGRAM GRADUATES
NABIS
COTREP
CORE COURSES
SKILL DEVELOPMENT
MULTIDISCIPLINARY INSTRUCTION INTERNSHIPS
INTEGRATING EXPERIENCES

FRAME 3
PROGRAM INSTRUCTIONAL MODE


FORMAL STUDY
INDEPENDENT STUDY
CORE COURSES
SKILL DEVELOPMENT
CLINICAL INTERACTION
MULTIDISCIPLINARY INSTRUCTION INTERNSHIPS
MULTIDISCIPLINARY INTERACTION
INTEGRATING EXPERIENCES
SEMINARS
PRACTICAL APPLICATION EXPERIENCES

Multidisciplinary resources are utilized and a National Advisory Board will be employed. The establishment of communications between this program and other programs for educational planners will also provide a constant input of information regarding program practices and developments in this area. Finally, the program will seek to identify and utilize its own best products as managers of clinical experiences for subsequent participants and as program contributors. The aim of this procedure will be constant program improvement through well-organized change.

The instructional mode which characterizes the program is a reliance on clinical experience. To realize the fullest potential of this experience three areas have been designated: a common core of courses, a clinical internship and specialized development at both the sixth year degree and doctoral levels. The style of instruction places a minimum reliance on lectures. Independent study, however, is a normal feature of the program and a maximum emphasis is placed on interdisciplinary seminars and on interaction with professors in clinical, operational and applied situations. (See Frame 3.)

Formal study, on the job training and application in clinical situations are the methods used to develop technical skills.

Political skills are developed through formal study, feedback from a "National Advisory Board and Intelligence System" and interaction with credibility panels.

Administrative skill development is anticipated through formal study and on-the-job application in designing and organizing planning components in local education agencies.

The multidisciplinary nature of the program has been designed so that each participant is provided with a basic background in the philosophy and theory common to all planners. This nucleus experience is accomplished through two core courses: a historical survey of planning and its interrelationships with social objectives with an emphasis on contemporary planning, and a background in planning theory with emphasis on the role of the planner in society, the total process and the end results. (See Frame 4.)

In addition to the nucleus experience, participants from all areas pursue one seminar course in each of five multi-disciplinary areas. These experiences are designed so that each participant develops an understanding of the basic principles and concepts, the terminology, and the aims and objectives intrinsic to these five basic planning areas: (See Frame 5.)

Physical Environment Planning: pollution control, transportation, utilities, and theoretical background for management science and engineering economics.

Area Analysis: planning for urban, suburban and rural land use, including a special emphasis on problems particular to different geographic regions.

Government Administration: fiscal administration, law and regulations, public opinion and public policy planning.

Regional Economics: practical and theoretical mathematical analysis of regional economics.

Educational Planning: planning for human resources programs, cost planning, quality educational planning, and planning educational objectives.

It is intended that these multidisciplinary experiences will enable the planner to work effectively with other planners, to communicate and to interrelate better on a basis of common understanding.

Actual practice in working with other planners is designed for the final stage of this part of the program. Multidisciplinary clinical internships are arranged to provide a practical working experience for prospective planners. A team of planners is formed consisting of representatives from each of the five planning areas: Physical Environment Planning, Area Analysis, Government

FRAME 4
COMMON CORE COURSES

PHILOSOPHIC BASE	THEORETIC BASE
•Introduction To Planning Historical Background Relations To Social Objectives Contemporary Planning	•Theory of Planning Role of Planner Total Planning Process Results of Planning

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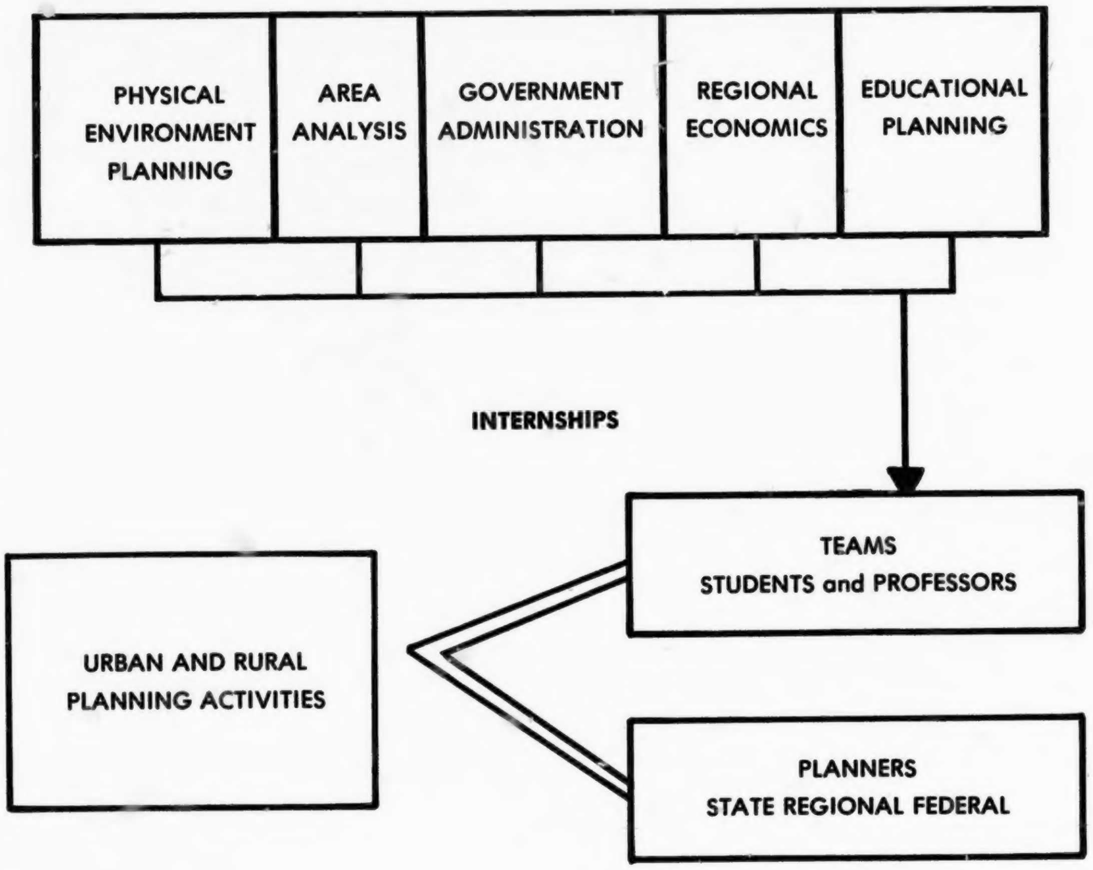
FRAME 5
MULTIDISCIPLINARY SEMINARS


PHYSICAL ENVIRONMENT PLANNING
AREA ANALYSIS
GOVERNMENT ADMINISTRATION
REGIONAL ECONOMICS
EDUCATIONAL PLANNING
INTERNSHIPS
TEAMS STUDENTS and PROFESSORS
URBAN AND RURAL PLANNING ACTIVITIES
PLANNERS STATE REGIONAL FEDERAL

Administration, Regional Economics, and Educational Planning. The team directs its attention to urban or rural planning and, with professors from each area, links with other state, regional and federal planners to instigate comprehensive planning activities.

Administrative skills and certain technical skills are recognized as necessary for the development of effective planners. While strongly interrelated, technical skills may be differentiated from administrative skills in that technical skill-building will focus on the ability to utilize certain educationally essential methods. In constrast, programs in administrative skills will be concentrated on developing an awareness of various types of theoretical and applied knowledge directly related to educational planning. (See Frame 6.)

In order that the program planner has an understanding of the forces at work within the situation in which he is employed, and in order for him to make full use of his program development ability, a theoretic approach to four areas of administrative activity has been developed. The areas include change theory, curriculum theory in programs and procedures of curriculum improvement, large and small group communications theory, and instructional leadership theory. Each of these areas would include both thorough investigation of current research in the subject, as well as analytical and participatory experiences. This would enable the planner both to acquaint himself with current thinking and observe means by which such new knowledge may be utilized. In addition to the theoretic approach, some of the unique material which this part of the program will cover includes the development of alternative solutions in decision-making processes, the initiating and receiving of communications within the educational institution, and the effects of group process and situational factors on the instructional leader.

In a program such as this, which brings together material from many sources and by a variety of methods, means must be found to assist the student in integrating the information into a satisfactory knowledge and behavioral pattern. To help the program planner build a useful, comprehensible experience out of the program, all of the participants will be involved in planning activities which are directly related to the course work content. Field experiences will be similarly constructed to bring the practical situation and the formal instruction content together in a meaningful way. In addition, all new content will be introduced to participants by groups of consultants and professors, offering a variety of perspectives to the material. Finally, the extensive operation of seminars, through both summer terms and the regular academic year, will offer the participants a continuing opportunity for discussion, with attendant opportunities for clarification, exposition, and reinforcement. (See Frame 7.)

As was previously suggested in this discussion of the program for educational planners, such a program remains effective only so long as it remains credible. Credibility, the assurance that the content of the program remains effective and current, demands that the project have both the capacity to develop new materials and to further identify appropriate experiences which would improve the planning ability of the program's enrollees. The research which will enable the program to accomplish part of these aims will be initiated in 1968-69, under the direction of Dr. Robert E. Bills. Dr. Bills will complete planning for experimental approaches in this area based on twenty years of research experience in behavior, perceptual theory, and perceptual typology, and will provide leadership for continuing investigation by a multi-disciplinary research team.

Evaluation will ensure that the program modify itself according to indicated needs. Two organized components of the program will provide both current development information in the field of planning and planning programs, and

FRAME 6
SKILL-BUILDING CORE

ADMINISTRATIVE SKILLS — THEORY AND APPLICATION

CHANGE THEORY Applied to educational change.	PROGRAMS & PROCEDURES IN CURRICULUM IMPROVEMENT Curricular Theory Application	COMMUNICATION IN LARGE AND SMALL GROUPS Conceptual design Initiation and reception of educational communication	IMPROVEMENT IN INSTRUCTIONAL LEADERSHIP Leadership theory Application to educational situations	DECISION-MAKING PROCESS Situational factors in educational decisions

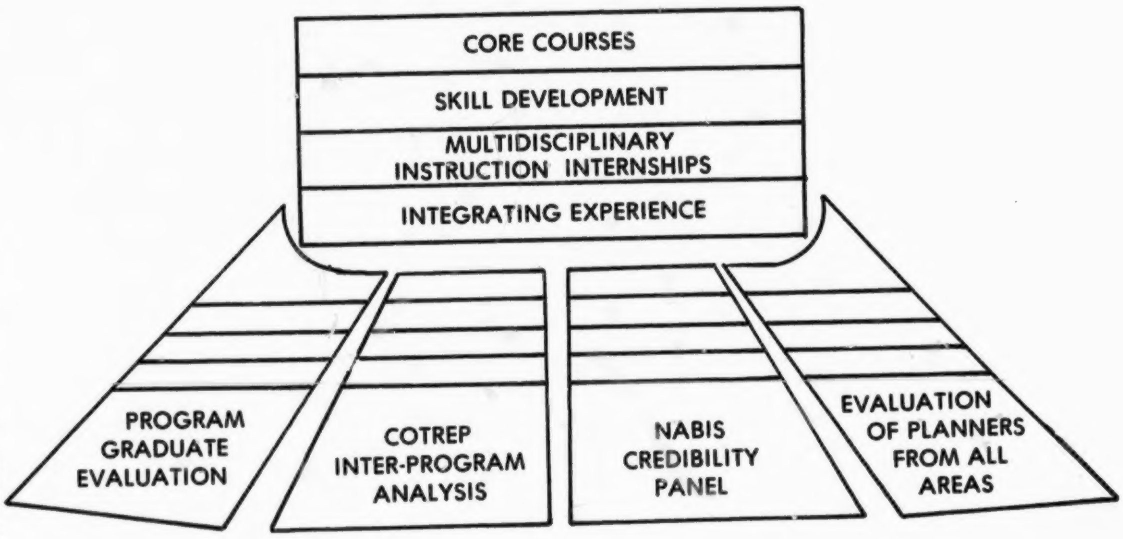
TECHNICAL SKILLS — OPERATION AND APPLICATION

EDUCATIONAL STATISTICS	RESEARCH AND SURVEY DESIGN	PROGRAM-ORIENTED MANAGEMENT SYSTEMS	PROGRAM-ORIENTED PERSONNEL SERVICES	RESEARCH DESIGN Analysis and application	EVALUATION OF LEARNING

FRAME 7
INTEGRATIVE STAFF SEMINARS

Provide Integrating Experiences
Participation in Actual Planning
Relation of Field Experience to Course Content
Introduce New Content

FRAME 8
EVALUATION AND CREDIBILITY


CORE COURSES
SKILL DEVELOPMENT
MULTIDISCIPLINARY INSTRUCTION INTERNSHIPS
INTEGRATING EXPERIENCE
PROGRAM GRADUATE EVALUATION
COTREP INTER-PROGRAM ANALYSIS
NABIS CREDIBILITY PANEL
EVALUATION OF PLANNERS FROM ALL AREAS

serve an evaluative function through continuing analysis of the program and program graduates. (See Frame 8.)

The first component will be a National Advisory Board and Intelligence System, (NABIS), bringing together outstanding planners from education, business, industry and government. They will advise the program staff of current developments in their fields, as well as evaluate the credibility of the program as it develops.

In addition, a second component will focus on Coordination, Training, Research and Evaluation Programs (COTREP) in the development area. Each of the participating institutions in the component has a program in a specialized area of planning, including Mankato State College's SEA Planners Program, the Southeastern Education Laboratory's Rural and Other Deprived Pupil Population Program, and the Alabama Educational Leadership Program, which incorporates all 118 LEA's in Alabama.

In addition to these two components, the re-evaluation of the program by graduates and the involvement in the program of its most effective participants will insure that continuous information will come to the program and provide for dynamic improvement.

NORTH DAKOTA AND BEYOND

Vito Perrone, Dean, New School
University of North Dakota, Grand Forks, North Dakota

Dr. Vito Perrone is the director of the New School of Behavioral Studies in Education at the University of North Dakota. After teaching history and social studies at Michigan high schools and being a professor at Northern Michigan University, he was appointed dean of common learning in 1966 and dean of graduate studies in 1967 at Northern Michigan University. He has been a member of the advisory council to the North Dakota State Board of Education for the Development of a State Plan for Higher Education and a consultant to the U.S. Department of State. Dr. Perrone received his doctors degree from Michigan State University.

I

Equality of educational opportunity must be foremost in our discussions relating to rural and urban education. The inequalities based on racial or ethnic factors, geographic location, or economic power have always been wasteful of human potential: unfortunately, they have been tolerated. This condition has changed! Inequalities that retard human potential, deprive individuals of self-fulfillment, or diminish the prospect of a meaningful life are no longer acceptable. The mechanisms of change, however, continue to confront us. Our "new" goals, no longer mere words, are difficult to reach in spite of serious intentions. We will undoubtedly go through periods of frustration; there will be many failures. Hopefully, however, there will also be successes, Both are bound to be with us as we face the enormous educational problems that plague both rural and urban America.

II

I intend to focus this paper on North Dakota, a rural state, but it seems appropriate, before addressing myself to that issue, to suggest that the problems confronting rural schools are not too dissimilar from those affecting the urban ghetto, core city schools. A few comparable examples follow. They are not intended to be all-inclusive; others could be cited.

Beginning with the rural and ghetto communities, both can be classified as "islands." They are more isolated, more closed, than America at large. Both tend to be culturally impoverished. Libraries are inadequate, aesthetic and technological enrichment are left to television, the leading mass culture instrument in our society.

Teachers in both types of schools are, for the most part, less well prepared than are teachers outside such schools. Increasingly, the master's degree is becoming a requisite for teachers. Yet, the numbers holding master's degrees and teaching in rural or ghetto schools are low. Not only are the qualifications less than desirable, teacher turnover is high. The needed stability and maturity levels are rarely reached in rural and ghetto schools. Such schools are "way-stations" for far too many teachers.

The instructional programs available to youngsters are generally limited. In addition, they are often alien to the culture, quite apart from the experience level of the young people being "served."

The foregoing excursion may appear diversionary in view of my principal thrust in this paper. But too often, we look at problems in isolation, failing to view the varieties of experience that might lend direction, failing to perceive the many similarities that exist in our diverse society. Let me now direct your attention to North Dakota, one of the more rural states in the United States.

III

Kent Alm is scheduled to discuss rather fully the Statewide Study of Education in North Dakota. However, to give a cultural and historical context to my topic, I will have to refer to it. The Statewide Study is comprehensive and sets forth a series of recommendations for change. One of its recommendations called for a statewide program designed: (1) to place a fully qualified teacher in every elementary classroom in the State by 1975, and (2) to alter dramatically the nature of the teacher-pupil relationship. The University of North Dakota responded by establishing the New School of Behavioral Studies in Education to develop, conduct, and test a new elementary school teacher preparation program. Inasmuch as I believe the New School's effort in North Dakota has potential as a model, I will, later in the paper, outline the directions that have been established. Let me first, however, present some data relating to North Dakota which reflect a rationale for the establishment of the New School. More than this, however, it exemplifies a condition not too dissimilar from that which exists in much of rural America. (And, as was suggested earlier, in many ways similar to the urban ghetto, core city.)

Tables I and II, depict the educational levels of North Dakota's elementary school teachers. Tables III and IV depict the educational levels of secondary school teachers. It should be noted that the data comes from 1965-66. There has been some improvement since then. The total number of non-degree elementary teachers, for example, is now down to approximately 52% as opposed to the 59.2% found in Table I. This, however, does not alter the basic picture.

TABLE I

Educational Levels of North Dakota Elementary Teachers

Type of School District	Level of Educational Attainment Less Than 3 years No.	%	Less Than 4 years No.	%	Bachelor's Degree No.	%	Master's Degree No.	%	Total No.	%
Non-Accredited HS	55	(18.0)	200	(65.3)	51	(16.7)			306	(100.0)
Accredited HS	386	(10.4)	1574	(42.5)	1598	(43.1)	149	(4.0)	3707	(100.0)
Graded Ele.	74	(24.0)	192	(62.1)	43	(13.9)			309	(100.0)
One-Room Rural	93	(42.4)	111	(50.8)	15	(6.8)			219	(100.0)
Total	608	(13.3)	2077	(45.8)	1707	(37.6)	149	(4.0)	4541	(100.0)

SOURCE: Data from the Statewide Study of Education

TABLE II

A Comparison of Educational Levels of Elementary Teachers in "Large" and Small School Districts*

Type of School District	Level of Educational Attainment Less Than 3 years %	Less Than 4 years %	Bachelor's Degree %	Master's Degree %	Total %
Districts with fewer than 400 HS Pupils	19.4	58.3	21.8	0.5	100.0
Districts with more than 400 HS Pupils	1.8	22.7	66.9	8.6	100.0

**"Large" has been placed in quotation marks for the sake of those readers from less rural, more heavily populated states than North Dakota. North Dakota has a few "large" cities. Fargo and Grand Forks have populations between 40-50,000; Bismarck and Minot have populations between 30-40,000.*

SOURCE: Data from the Statewide Study of Education

TABLE III

Educational Levels of North Dakota Secondary Teachers

Type of School District	Level of Educational Attainment							
	Bachelor's Degree		Master's Degree		Ed. S. Degree		Total	
	No.	%	No.	%	No.	%	No.	%
Non-Accredited HS	197	(95.1)	10	(4.9)			207	(100.0)
Accredited High Schools	1950	(86.7)	295	(13.1)	5	(0.2)	2250	(100.0)
Total	2147	(87.4)	305	(12.4)	5	(30.19)	2457	(100.0)

SOURCE: Data from the Statewide Study of Education

TABLE IV

A Comparison of Educational Levels of Secondary Teachers in "Large" and Small School Districts

Type of School District	Level of Educational Attainment			
	Bachelor's Degree %	Master's Degree %	Ed. S. Degree %	Total %
High Schools with less than 150 students	96.4	3.5	0.1	100.0
High Schools with more than 150 and less than 400 students	93.0	7.0		100.0
High Schools with more than 400	69.0	30.5	0.4	100.0

SOURCE: Data from the Statewide Study of Education

It is unnecessary to enlarge of the foregoing. The qualifications of elementary teachers, in particular, are shockingly inadequate. The more rural the setting, however, the more severe the condition.

Normally, school districts attempt to maintain a reasonable balance between "young" and "old" teachers, and between men and women. This is a difficult balance to achieve as factors other than educational concerns are often more dominant. Tables V and VI illustrate respectively (1) the mean age, and (2) the male-female distribution of North Dakota's elementary and secondary school teachers.

TABLE V

Mean Age of All Elementary and Secondary Teachers By Types of District

Type of Districts	Mean Age Elementary	Mean Age Secondary
Non-Accredited High Schools	48.5	35.7
Accredited High Schools	40.6	34.7
Graded Elementary Schools	47.4	
Rural One-Teacher Schools	51.6	

SOURCE: Data from the Statewide Study of Education

TABLE VI

Male-Female Distribution of All Elementary and Secondary Teachers

Type of Districts	Elementary Male-Female %	Secondary Male-Female %
Non-Accredited High Schools	13.0-87.0	64.2-35.8
Accredited High Schools	16.8-83.2	69.5-30.5
Graded Elementary Schools	8.7-91.3	
Rural One-Teacher Schools	6.3-93.7	

SOURCE: Data from the Statewide Study of Education

As can be noted, women predominate in the elementary schools. The more rural the setting, however, the higher the ratio of women to men. A better balance would be desirable. In terms of age, the more rural the schools, the higher the mean age. The fact that the group of teachers with the higher mean ages also have the least preparation points out an area of considerable concern.

The effects of teacher turnover are difficult to assess objectively. It seems clear, however, that continuity of program, understanding of the community, familiarity with the environment are important. Table VII presents average turnover of all teachers during 1967-68. As can be observed, the degree of turnover is greater in the smaller, more rural districts.

TABLE VII

Teacher Turnover By Size of High School District

Size of 1-12 School Districts	Range in Percent	Median in Percent
Less than 5 teachers in High School (30 school districts).	0-77	28
Less than 9, but more than 5 teachers in High School (92 school districts).	0-64	21
Less than 19, but more than 10 teachers in High School (54 school districts).	0-62	17
More than 20 teachers in High School (18 school districts).	0-75	15

SOURCE: Data from NDEA, Annual Report, June, 1968

If the turnover, reflected in Table VII, came about only by virtue of less prepared teachers leaving to be replaced by better prepared teachers, there would be reason for optimism. To a small degree this is, in fact, occurring. But to an equal degree, better prepared teachers are leaving to be replaced by less prepared teachers.

There is ample evidence to show that kindergarten and pre-kindergarten programs add substantially to success later in school, particularly among rural children. Head Start programs have provided considerable examples to this effect. Nevertheless, only 2804 kindergartners—almost entirely from five of North Dakota's largest urban centers—were enrolled in 1966-67. There are fewer today, inasmuch as one of the aforementioned cities dropped its program and another increased tuition fees to cover the costs. Approximately 12,000 youngsters, in 1966-67, were of kindergarten age but had no public kindergarten to attend.

Library, counseling, special education, and vocational education services are no longer "frills." They are essential. In rural states such as North Dakota, such services are in short supply. The larger school districts are more apt to have such personnel than the smaller. The amount of personnel preparation for these educational services also varies. Where the smaller, more rural districts have such personnel, they tend to have less professional training.

Arnold Gallegos is addressing himself to problems of reorganization; hence I will only suggest that it is absolutely essential in North Dakota. This, of course, is easier to say than to execute. There is a large complex of traditions and values connected to a person's devotion to his small school district. Charles Loomis stresses: "his personal knowledge of his neighbors who are school board members; his traditional idea that the school which his child attends must be a part of an easily accessible central organization; his desire that the child not have to walk or ride a bus too long; his hope that taxes will not be too burdensome and that school finances remain simple enough that he can understand them; and his preference for the present system with its known strengths and weaknesses over a proposed system with unknown qualities." (*Social Systems: Essays on Their Persistence and Change*, Van Nostrand Co., Princeton, New Jersey, 1960, p. 285.) It is relatively easy for educational planners to dismiss the foregoing traditions and values, but these are emotional issues that are not easily dismissed.

IV

The New School of Behavioral Studies, an outgrowth of the Statewide Study of Education, is organized to join hands with the State Department of Public Instruction, a large number of North Dakota school districts and the U. S. Office of Education in a mutual effort toward quality education for every youngster in the State.

The most satisfactory thing that I can do now is to describe the New School as a teacher preparation model, as well as outline the directions that have been set by its faculty and staff.

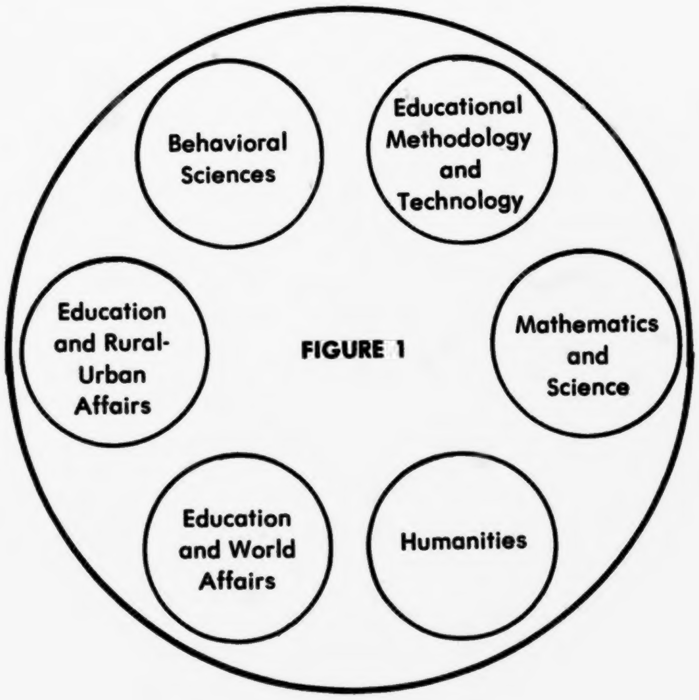

Behavioral Sciences
Educational Methodology and Technology
Education and Rural-Urban Affairs
Mathematics and Science
Education and World Affairs
Humanities

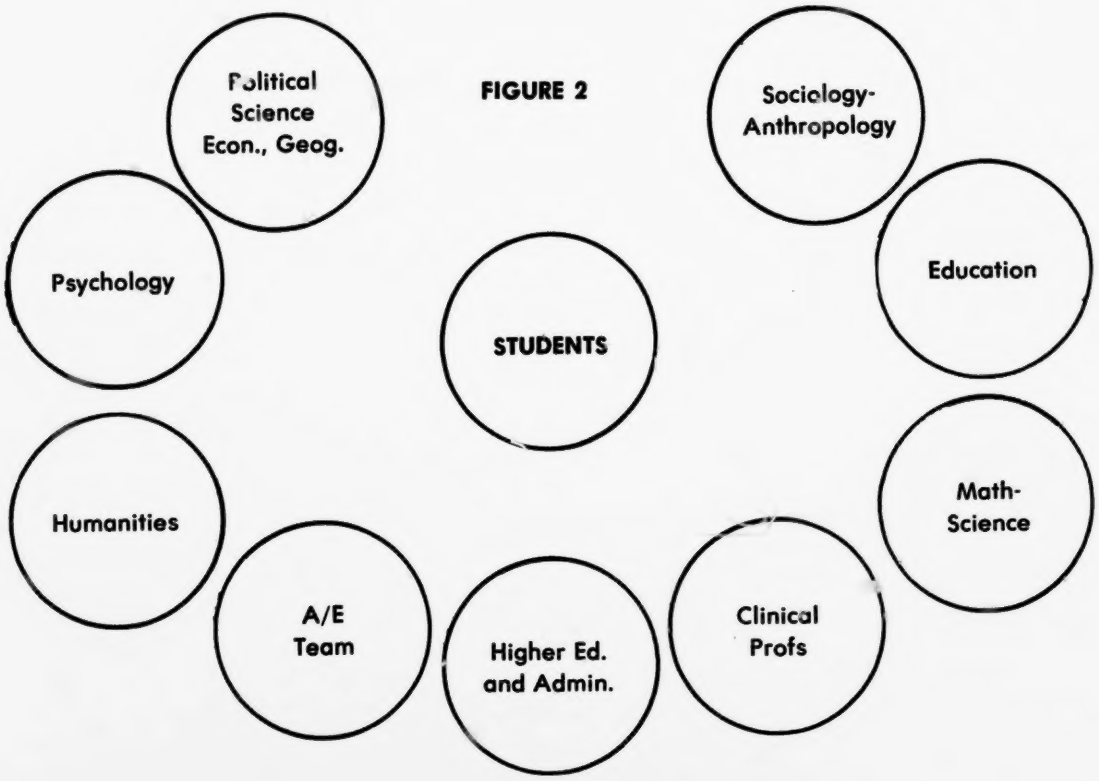
FIGURE 1

The New School represents a serious attempt to unify teacher preparation. Administratively, it is established as a college with the University, separate from all others, but with close ties to the College of Arts and Sciences, and Education. The New School program, laid on top of 2 years of liberal arts study, is of three years duration, beginning with the Junior Year and culminating in a Master's Degree.

The basic organizational concept for the New School, as illustrated in Figure 1, is unity. Education and the traditional liberal arts are under the same roof, parts of an inter-related structure.

The faculty is diverse in background. Many have never been closely aligned to teacher preparation. They are, however, interested in and committed to Education. Figure 2 depicts the New School faculty as it exists at this point.

FIGURE 2



As can be noticed in the foregoing, a structural unity has been established insofar as the University setting itself is concerned. But there is obviously more to consider. Dr. Frankie Beth Nelson, at a recent Association for Student Teaching Workshop (See: *Proceedings, 1968 AST Summer Workshop*, University of Hawaii.) discussed very pointedly the New York City Public School System, its characteristics, its philosophy, its value system. As a contrast, she discussed similar aspects of the teacher preparation institution which provides the most teachers to New York City. That they were philosophically apart and were often functioning at cross purposes was not surprising. In fact, I would suggest that most teacher preparation programs and "real" elementary and secondary schools where children work, study, and play, are out of touch with one another.

The New School has developed a cooperating relationship with a number of school districts spread over the State of North Dakota. These districts are sources for fifth year teacher-internships, undergraduate internships, and in-service training: their schools will serve as demonstration centers for individualized instructional programs. It should be noted that at least 1/3 of the students in the New School will be less than degree teachers from the cooperating schools. The majority will return as fully qualified teachers to their original district; thus, helping to maintain the New School—cooperating local district link. The cooperating schools will become an integral part of the life of the New School through a number of resident clinic professors. It is in the field where much of the critical work needs to be done. One of the paradoxes in the rural community has been the lack of opportunities for teachers to extend their educational levels or to become intimately involved with new educational practices. The New School, through its field commitment, is establishing a means to get at what Dr. Ronald Lippitt of the University of Michigan has called the two serious gaps in most educational endeavors: (1) the gap between the system which develops the new knowledge and the system which must utilize that knowledge; and (2) the gap within the utilization system between the knowledge sub-system and the action sub-system. ("Intra-system and Inter-system Linkage Dynamics," AERA Symposium presentation, February 16, 1967.) Teachers, after all, must translate the knowledge into classroom action. Otherwise, the enormous effort will in the end mean little.

The New School program is being looked upon as a possible model for the State Colleges in North Dakota. It is expected that the State Colleges will receive some legislative encouragement—beginning in 1970—to plan and then to initiate and develop several programs of their own. With this in mind, the New School has developed a doctoral program to prepare potential faculty for the State Colleges.

The instructional mode being fostered in the New School and the cooperating districts is patterned after the "free day" or "integrated curriculum" now beginning to be practiced extensively in England. It should be made clear, however, that the New School does not propose a patent replication. The general mode is an appropriate application to the situation in North Dakota for several reasons:

1. While enabling pupils to attain appropriate levels of socialization and skill development, it maximizes development of two qualities in children that seem to be critical for their successful transition from an essentially rural to urban culture. These are: creative expression and quantitative reasoning. In North Dakota, rural children score lower than their urban counterparts on conventional achievement tests; at the same time the State is rapidly urbanizing.
2. It relies heavily on peer—rather than teacher—assistance and instruction; in North Dakota, most schools are so small as to make graded patterns of organization inefficient and uneconomic, while broad ungraded units that permit grouping of pupils by age groups 6-8, 9-11, and 12-14, can be achieved readily.
3. It permits the teacher to focus on problems of individual instruction, based upon careful diagnosis of learning problems; present practice in most North Dakota schools mitigates against appropriate diagnostic and prescriptive behavior, and teachers are not now equipped for this task.
4. It permits a student to progress at a rate appropriate to his individual interests, capacities, and development, rather than at a rate prescribed either by his teacher or an artificial grade grouping.
5. It encourages each pupil—by surrounding him with a multiplicity and diversity of materials, tools, and other stimuli—to broaden his vistas beyond his immediate age group and environment, and to assimilate elements of a broader culture.

(For a further discussion of the foregoing, see the brochure: "New School of Behavioral Studies in Education," available through the New School, University of North Dakota.)

It is an elementary school curriculum mode that lays stress on some of the following ideas: (1) the increasing role of intrinsic motivation, (2) emphasis on learning how to learn, (3) emphasis on individualizing instruction, (4) emphasis on creativity and divergent thinking, (5) greater flexibility of planning, (6) ungraded schools, (7) a greater emphasis on the open ended aspect of learning, (8) a greater use of the environment, (9) a variety of team teaching practices.

The foregoing is what teachers themselves see as desirable. Yet, there are few models, little help. John Goodlad has pointed out that we are in a creative, inventive period of time with regard to education. Yet, the vast majority of schools remain unchanged.

The instructional mode and the philosophy which supports it, cannot prevail in the schools themselves if it does not, in any way, prevail at the University. The traditional University instructional mode must undergo change. Here, too, there are few models.

A new relationship between the university professor and prospective teacher needs to be developed. We have taken the position that New School faculty must demonstrate what teaching is and can be—a human and committed enterprise. A variety of instructional modes are planned. Included among them are individual study, tutorials, seminars, workshops, colloquia, and field experience. A balance between the active and the reflective, the theoretical and the practical seems necessary throughout the endeavor.

An important element in the New School activity is research. The primary, initial foci will be classroom climate or environment, teacher-pupil and pupil-pupil relationships. This is hardly the place to outline all of the instruments and procedures to be employed in carrying out the supporting research. Let it suffice for now that changes in the program will be made consistent with the results of analysis and evaluation. However, the research itself promises intrinsically interesting results that may be applied to situations outside the study population and in states other than North Dakota. The most promising of these include:

1. A multi-disciplinary research and evaluation matrix that describes the interpersonal relationships of the classroom; this may be employed as criterion in the evaluation of instructional materials, methods, and modes in the elementary school, whether the school is conventionally or experimentally organized.
2. Insights into the teacher's personality and cultural orientation as factors in teacher-pupil and pupil-pupil relationships.
3. A behavioral description—and video-tape reproduction—of "integrated curriculum" modes in the cooperating elementary schools as contrasted with instructional modes of conventional schools. These should provide potentially valuable materials not only for further research, but also for in-service and pre-service preparation programs of teachers and administrators.

V

Four, or even three, years from now would be a more appropriate time for me to discuss the manner in which the New School teacher preparation program has functioned. By that time, the first experimental aspects of the New School program will be visible: we will have refined the curriculum, graduated the first class of students who participated for three full years in the New School, engaged more local districts in a teacher-student exchange program, and evaluated the research findings. Until then, I can only suggest that we will do everything possible to meet the educational needs within the State of North

Dakota. Obviously, help will be needed. The State Department of Public Instruction, with its broad overview of education in the State, and with its increasing control over heretofore USOE administered funds, must become an agent for change, in close collaboration with not only the elementary and secondary schools but with programs like the New School and other teacher service units within the State's Colleges and Universities.

Moving beyond North Dakota, State Departments have the opportunity to serve as never before.* Universities have too long functioned in isolation, sponsored occasional and non-systematic in-service programs, and conducted pot-pourri extension courses. With assistance from State Departments of Education, higher education throughout the United States can serve rural and urban needs better. Hopefully, the foregoing is suggestive of some of the needs, a particular direction, and a focus for some serious discussion.

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*In this regard, State Agency Planners should look at what is happening in Vermont. Their "Regional Action Center Plan" to "Advance Creative Teaching in Vermont" is an imaginative and exciting endeavor.

SETTING GOALS FOR PLANNED RESULTS

Gerard (Gus) H. Gaynor, Director
Learning Systems Laboratory, 3M Company, St. Paul, Minnesota

Mr. Gus Gaynor is currently the director of the contract research laboratory for Minnesota Mining and Manufacturing in St. Paul where he investigates the physical and social sciences as they relate to the solution of today's social problems. During his career, Mr. Gaynor has been a designer in an upper atmosphere research laboratory at the University of Michigan and manager of the applied research division of Bowser, Inc., and organized Electronics Mechanisms which handles instrumentation and measurement. Since joining 3M, he was also concerned with instrumentation before taking the directorship of the research contact laboratory.

Introduction

A well defined and correctly delineated long range or short range plan is much like a report on some subject so voluminous that one hardly knows where to begin the adventure. Like the report it only provides some facts, provides some directions, and should allow for sufficient alternatives. The implementation of the *PLAN,* however, is quite another matter. The *PLAN* should be looked upon as just another tool in the management function.

Management in the educational establishment works under many constraints which industrial or business management never faces. I will not attempt to discuss these constraints for all of you are probably aware of them. You have probably experienced them on many occasions in numerous forms with peculiar nuances. *However the most illustrious and well defined plans are totally useless unless the management plan is developed to make them a reality—to make them happen.*

The concept of *SETTING GOALS for PLANNED RESULTS* is one which can aid in making plans a reality. Further *SETTING GOALS for PLANNED RESULTS* is a philosophy, or if you prefer a system of management. No plan can be implemented without the effective and efficient use of *human as well as material resources.* What I will submit for your consideration is *not a cookbook* approach to implementation of your plans, but raise some issues which could prevent implementation of those plans and provide you with the tools to better guarantee success.

Peter F. Drucker is credited with enunciating what he called *Management* by *Objectives.* However, the concept was used by many, knowingly or unknowingly, many years prior to his discussions. The basic concepts of Management by Objective are simple. Successful Management by Objective programs require competent management. They require managers who want to make things happen—they require managers who are not satisfied with the status quo and are willing to do something about it.

During recent years a considerable amount of material has been developed covering the topics of *Management by Objectives, Management by Exception,* and *Management for Results.* The evaluation of all of these systems resolves itself to the fact that a manager, to be effective, must set objectives and further must determine some means of *measuring performance* objectively rather than subjectively. Objectives become *results oriented* on a "go—no go" basis.

Present day literature is primarily geared to and considered in terms of objectives that are set up for corporate executives. The same concepts are workable in the educational scene if adequate consideration is given to the constraints built into the educational community. While a directive may state that a long range plan will be developed, the probability of its development without well defined goals and milestones is probably rather low.

I realize that the terms Management and Manager are foreign to the educational community. I ask your forebearance in my use of the words Management and Manager because I firmly believe that is what much of education is lacking. May I add that this is not to place any blame on the educational hierarchy. Present constraints do not allow for the use of modern management practices in educational systems. Society generally mitigates against it.

Setting Goals for Planned Results

SETTING GOALS for PLANNED RESULTS can be described as a process whereby one in a management position of an organization and the individual or individuals to whom the work has been assigned identify and define common goals. Each individual's responsibility is defined in terms of the *RESULTS* expected from him. Considering this program, we must realize that it is as fundamental in management as in any other organization that we have effective managers and ineffective managers. The important point to be remembered is that once a man is given a managerial responsibility that his activities and the activities of his people must be regarded as affecting the complete organization and not just his own immediate group.

Managers have the responsibility of setting proper examples for supervisors, program leaders, and all personnel they contact. Many young people, will learn how to manage or mismanage from the methods and techniques used by their managers. One of the dangers that is associated with installing a program of *SETTING GOALS for PLANNED RESULTS* is that managers may come to the conclusion that by going through a routine set of mechanical operations, they may successfully apply the system. A program of this type cannot be installed overnight. It will take time both on the part of the manager as well as his staff if it is to be effective and if it is to provide a payoff. While implementation of a system of this type places certain additional burdens upon high level management (administration) the fact remains that a manager is still capable of installing a system in his own department as long as he has the overall responsibility for managing the department and the personnel assigned to him. The question now arises as to what steps are required to install the system, and of course, the usual questions arise. How do I get started? What's involved? How long is it going to take? What is the possible payoff?

The present day literature on this subject seems to be quite theoretically oriented. Since much is written by academicians not actively engaged on a day-to-day basis with the problems facing a manager, we find it necessary to fill in many blank spaces. George S. Odiorne, author of the book *MANAGEMENT BY OBJECTIVES,* states that a workable procedure for the individual manager involves two points: (1) at the beginning of each budget year the manager and each of his subordinates agree on the subordinate's target of performance for the year. (2) at the end of the year they take out these targets and jointly review the subordinates performance against them. To use these two concepts for installing a system is generally unworkable and will lead to no furthering effectiveness. Odiorne follows up his two basic concepts in regard to setting goals with subordinates as follows: Step 1—identify the common goals of the whole organizational unit for the coming year. He further lists the following typical areas that may be identified as common goals: (1) profitability, (2) comparative position, (3) productivity, (4) technological leadership, (5) employee development, (6) public responsibility, (7) employee relations. Keep in mind that these are referred to an industrial organization. We can elucidate our counterpart in the educational establishment.

Odiorne then sets up Step 2 as follows. Clarify your working organization chart. Sketch the actual organization of the groups under your supervision, showing titles, duties, relationships and impending changes. As a manager you are responsible for achieving organizational results and personal responsibilities. You worked out performance budgets only for those reporting directly to you. Those below that level should work out their budgets with their own immediate supervisor. In setting of goals with your immediate subordinates, he suggests that you take stock of the men with whom you will be setting performance budgets. Review each man's past work assignment, appraisals, salary progress, etc. and note any special factors about him in his work. Also, define what his major responsibilities are and might be in the future, as well as what is to be expected of him.

He then follows to Step 3 where he says, "set objectives for the next budget year with each man individually" and he recommends the following procedure. (A) Ask the subordinate to make notes on what objectives he has in mind for the next year and set a date to discuss these with him. Normally, these goals will fall into four categories, (1) routine duties, (2) problem solving goals, (3) creative goals, (4) personal goals. (B) Before the meeting list some objectives you would like to see him include for the next year and have them ready. Note any innovations and improvements required of his particular function. (C) In your personal conference, review the man's own objectives in detail and offer your own suggestions or changes. (D) Have two copies of the final draft of his objectives typed, give him one, and keep one for yourself. (E) Working from the final agreement, ask him what you can do to help him accomplish his objectives. Note his suggestions, keep them with your copy, and include them in your objectives.

Step 4 is as follows: during the year check each subordinates goals as promised milestones are reached. (A) Is he meeting his targets? Time, cost, quantity, quality, and service should be measured here. (B) Should his targets be amended? Don't hesitate to eliminate inappropriate goals or to add new targets if a special opportunity arises. (C) Are you delivering on your part in helping him? (D) Use the jointly agreed upon goals as a tool for coaching, developing, and appraising each man's performance on a continuous basis. Allow a man to make some mistakes, don't hound him for them, but use his failures as a platform for coaching.

These steps are greatly oversimplified. The feedback loops and the step interrelationships are not as clear cut and well defined. We are dealing with human beings. A workable program may take as much as three years to install. The very name *Management by Objectives* creates all types of illusory concepts in the mind of the professional. No professional likes to think of himself as being managed. Thus the change in nomenclature to—*SETTING GOALS for PLANNED RESULTS*.

Odiorne also oversimplified and discharged his activities regarding measuring of results against goals with four relatively simple steps. I will state them here as listed in his book. Step 1—near the end of the budget year ask each subordinate to prepare a brief "statement of performance against budget" using his copy of his performance budget as a guide. Tell him not to rewrite the whole statement but to submit a written estimate "giving relevant figures where possible" of his accomplishments compared with his targets. In this statement he should also give reasons for any variances and list additional accomplishments not budgeted for. Step 2—set a date to go over this report in detail, search for causes of variances, ask yourself (a) was it my fault, (b) was it some failure on his part, (c) was it beyond anyone's control. Then get his agreement on just how good his performance was and where he fell down. Step 3—at this meeting you can cover other things that may be on his mind. If he is so disposed, you might discuss such matters as relationships on the job, opportunity, job related personal problems, and etc. but do not rush this. If he prefers, set another date for talking about these things. Step 4—set the stage for establishing the subordinates performance budget for the coming year.

From these last two techniques of setting goals as well as measuring results, it is perhaps necessary to mention here that techniques of this type can lead to considerable misunderstanding and provide some rather misleading impressions regarding the installation of a system. A system of this type does not call for adherence to a prescribed formula or to a prescribed set of rules. It still requires the manager to exercise judgment and make decisions. In setting goals we should keep in mind that a considerable amount of time will be required in the initial stages to set goals and objectives. Undoubtedly, both manager as well as employee will make a considerable number of errors in setting or establishing meaningful objectives. Setting meaningful goals and objectives takes time—it requires that the manager have a full understanding of the personalities with whom he is working. Setting objectives will take time, and more time is required than will be anticipated.

Installation of a system of *SETTING GOALS for PLANNED RESULTS* requires an intense effort on the part of the manager and the employee to be intellectually honest. This is not to infer that either is basically dishonest. However, each of us as individuals has certain biases and certain preconceived notions and we project these biases in our dealings with other people. Oftentimes, a particular loyalty to an individual or toward a particular department has a tendency to blind the manager to the conditions as they are. In a similar manner an individual achiever blinded by particular concepts that he developed and that represent part of his whole being is blinded to all other approaches. Biases of this type between subordinate and manager will eventually lead to a system whereby each demonstrates what was believed at the time a program was started instead of beginning with the facts and asking what the facts have to say.

Some guides to an effective program of *SETTING GOALS for PLANNED RESULTS* may be as follows: (1) The manager should clarify common objectives for the whole unit, (2) he should establish goals to challenge the individual subordinate, (3) he must creatively use the talent in his group both individually and collectively, (4) he must shape his units common objectives to fit those of the larger unit of which he is a part, (5) he sets meaningful and realizable goals, (6) he directs responsibilities to the most appropriate positions, (7) while he must transfer certain responsibilities he does so in a definitive fashion to one individual so that no split responsibilities prevails, (8) he clarifies areas of responsibility rather than working methods, (9) he emphasizes achievement of objective rather than satisfaction of a pleasing attitude, (10) he makes policies to guide the action of the group, rather than issue after the fact corrective judgments, (11) he probes to discover what program his subordinate proposes to follow to achieve his goals, (12) he makes his and higher managements needs known to his subordinate, (13) he concentrates on the obstacles that are likely to hinder the subordinate in achieving his goals, including the number of emergencies or routine duties which consume time, (14) he encourages development of new goals and ideas by his subordinates, (15) he concentrates on activities that help the subordinates to succeed, (16) he sets immediate target dates or milestones by which to measure his subordinates progress, (17) he introduces new ideas from outside the organization and permits and encourages subordinates to do so, thereby minimizing the effect of the status quo, (18) he establishes targets of opportunity for the subordinate, (19) he modifies previously agreed upon goals when proved unfeasible, irrelevant, or impossible, (20) he rewards success when goals are achieved and provides the necessary guidance when problems arise.

In setting goals as we have previously stated it is necessary to set objectives for all individuals in an organization. It is only then that the individual can become positively and personally involved in the success or failure of a particular project. If an employee is to become committed he must play an important part or at least play a part. The time element or span of the goal must be geared directly to the particular type of project at hand. It could be a day, it could be a week, it could be a year.

In setting goals it is further necessary to set the goals and to break them down to such an extent and in such a manner that the results can be measured. This of course, as we all know, is not easy to do in many areas. While it may be possible in many cases to use dollar percentages, amounts, rate of increase, or rate of decrease as a means of measuring, it is seldom this specific in the research or innovative areas. It is difficult to measure accomplishment with a particular group of people on the basis of dollars cost when nonrepetitive programs are involved. True, that in the final analysis the dollars cost can be eventually referred to the value of the program developed, however, this is an intangible at the operating level. Caution must be exercised in setting up yardsticks for evaluating the measurable results based on the record system which the organization normally provides. It is always possible to make a particular story look as good or as bad as we may desire by picking the proper figures out of a set of data.

Measurements—even crude measurements, can very well be the first step toward determining a meaningful technique of measurement. Obviously, these measurements are not good over a long period of time, however, they can be refined as time progresses. Measurement even though somewhat inaccurate, can be used as a motivating technique because there is at least some means available of gauging progress. In this type of situation it is possible for the employee to better understand the overall objectives of a particular group and the responsibility that the group has in relation to the whole system.

Managers often have a tendency to define a particular position on the basis of work to be accomplished in this position. The job description thus often attempts to describe the many and varied *duties that an individual may be required to perform,* and further many of these duties are subsequently used as a means of setting goals. The difficulty in an approach of this type is that the man may actually be steered away from meeting the particular goals. He often fails to see the final accomplishment and spends the majority of his time working out the individual subparts of a particular program, rather than viewing the complete program in its proper context. Job descriptions used in this manner can give the individual the notion of a cookbook type of approach to meeting his particular obligation to his fellow employees. Techniques of this type restrict the judgment that the individual should be allowed to exercise. Of course, this judgment must be kept within the scope of the individual's training and further the manager has the responsibility to see that the judgments made by the individual are not going to create major problems for the group or for himself. A common error made in setting goals is that the goals are set in relationship to the job rather than in relationship to the individual. This type of a technique has often ruined a well-qualified individual. The goals for a particular job assigned to an individual with ten years experience obviously would be totally different than those assigned to a neophyte.

Making up lists of work to be accomplished or activities responsible for, has a tendency to give the wrong direction. The employee in completing 90% of his tasks may not have been challenged—90% respresented the simple, straight forward type approaches, which did not force him to challenge his own thinking or to "stick his neck out" in order to perform a particular task.

In looking at goals it is often advisable to assign a particular percentage value to the goals. We might use as an example, the case where five objectives have been outlined. Obviously, each of these objectives should not be weighted a flat 20%. Perhaps one of them is weighted 50%, two at 20%, and two others at 10%. Better balance of effort is obtained from the individuals attention toward the complex problems which require that he stretch his imagination as well as his capability, rather than performing the less challenging tasks. It is often advantageous, depending upon the individuals state of development, to list only the important goals calling out the fact that many minor efforts, which you require of him are taken for granted, must be accomplished and represent no point value whatsoever. Keep in mind that when setting goals, these goals must be reasonable. They must challenge the individual, but they should be set on the basis of possible accomplishment.

Goals may be set for an individual who does not have complete control over a particular area, but who represents a strong influence on the results of the goals of the group. Goals, as specified, should be geared at such a level that some improvement in the individual's capability is gained from each work period which is used as a basis for determining performance. It is perhaps this area of accomplishment that represents and provides the best recognition for the individual. Too often, we find ourselves in the situation where the man really cannot point with pride to any particular development which he has accomplished, because he never sees it through to the finish. To quote an old cliche, "There are many people who start things, but few who finish them."

In setting goals we must realize a goal must be set in light of conditions as they exist and not as one would hope that they exist. As a result determination of a group of goals requires that many aspects of a goal be taken into account. It is advantageous to let the individual know what constitutes satisfactory meeting of a goal, and what constitutes outstanding performance. This can be accomplished quite easily by asking the question; what represents a reasonable performance and what would represent outstanding performance? The level of accomplishment is a matter of judgment. By defining what outstanding performance is and what outstanding accomplishment will be considered in terms of meeting the goals, the manager is in a position to inform the individual as to what will be the criteria of an outstanding job. Once again, this could be completion prior to schedule date, possible cost reduction, meeting broader specifications, and many others of a similar nature.

Goals can be used to stimulate the individual. If they are to be used as motivators, they must be established in such a manner that the individual feels they are fair. While it is necessary to bring the individual in on any discussion regarding the setting of goals, it must further, however, be realized that setting of goals is the responsibility of the manager. It is really his final expression to the individual regarding that level of accomplishment he expects him to attain.

The following approach may be used quite effectively in setting goals. The manager should first discuss the general overall program with the man and show him what it means in terms of meeting a particular goal or overall departmental goals. In this manner, he automatically allows the individual to realize where he fits into the whole operation. The individual should then be given an opportunity to think over the discussion he had with his manager and return with a list of possible goals which he could set for himself. In essence, you are asking the man how much of the responsibility of this project do you want on your shoulders. Since most competent men will not want to be considered as not doing their share, you will normally find that the individual will set goals at a much higher level than you would. It is thus necessary for you to use your judgment to temper and to bring a certain amount of reality into his goals, yet at the same time not doing anything to curtail his initiative.

Assuming that the individual is well qualified, you will find that this period gives him an opportunity to think over the particular problem seriously, and realizing the fact that the goals which he established he will be held accountable for, will force him to look more closely and in greater detail at his own goals. If he is to do a realistic job, it will be necessary for him to do a considerable amount of planning, for it is only through this type of a procedure, that it is possible for him to set goals. The manager should not be adverse to lowering the goals of an individual, because if the individual sets his goals at too high a level and is not capable of meeting them, this becomes a considerable demotivating factor. In keeping with our previous discussion of percentages, ask the individual to place percentage values on the particular goals which he establishes. Once a group of goals is determined the manager should adopt a very positive attitude in regards to the completion or the meeting of these goals. It is often much easier to change goals or to minimize them. However, the manager must realize the fact that the initial goals were set through discussion, through understanding based on facts, and as a result should be firmly enforced, Obviously, there will be times when conditions may change, circumstances may change, new technology may develop which will necessitate a complete revamp of goals. In these cases the necessary changes should be made. Goals for individuals must be thought out carefully because nothing can be more detracting and more distracting to the individual employee than to have a new set of goals set for him at every turn of the clock.

Many managers should question their attitude regarding the failure of meeting goals. It is obviously much easier for the manager to ignore failure than to face it squarely. The unfortunate part is that once an individual realizes the fact that goals may not be met, and that he may still continue on his daily work without any coaching or any criticism from the manager, this is the day that he is taking the upper hand. The only way to approach a matter of this type is that the manager must at all times require a certain basic accomplishment of goals in every period under appraisal.

In order for an individual to grow in a particular position and in order for work to be challenging to him, there is a limit to which a manager can allow the individual to make decisions. This is a matter which is not easily resolved for it varies from individual to individual as well as from manager to manager. However, the basic precept that if a man has a responsibility for a particular goal, he should be permitted to make the normal number of errors while making the necessary decisions to achieve his results still prevails. Once again, we find ourselves using the word "normal," and while it would be advisable to look at matters of this type on a purely objective basis, it requires the greatest integrity on the part of the manager to realistically appraise what would be normal and what would be an abnormal number of errors on a job assignment. Situations where the individual is really not given an opportunity to make any errors whatsoever, cannot possible result in growth. Errors will be made. The objective is to learn from them.

It is perhaps advisable to discuss with a subordinate what are considered permissable errors, what is the variance between what the manager may consider a minor or a major error. Obviously, a young man in his first position is going to create many errors. As long as they are small, they represent part of his educational process. This whole concept of errors becomes important because if the manager takes it upon himself to correct an employee for every minor error he soon faces a situation where the subordinate will not make any decisions on his own for fear of making an error. Yet at the same time a manager must be cautious in pointing out errors of a significant nature to the employee. If he fails in this respect the employee will conclude only that the manager really has not set any standards of achievements. Perhaps this can best be summarized by the statement which is heard quite often *"you can make an error once, but don't make the same error twice."*

This leads us to the question of how much authority do you give a man. Obviously, it is necessary for manager and subordinate to have a clear understanding of just how far the subordinate may go before referring matters back to the manager. While it is true that some people can establish a basic rapport where one knows just exactly what is expected, and the other one knows how far he can go, in actual practice this does not work too effectively. A manager establishes goals and holds the individual completly accountable for the total performance. The setting of goals, however, does not necessarily assure accountability of the individual.

Accountability cannot be defined concretely. If an objective is delegated to a man, he must feel a sense of obligation for its accomplishment. If it is accomplished, he personally gets the credit. If it is not accomplished, he is aware that it represents a failure on his part. He must feel that it applies to him and no one else.

We are all aware of the fact that while we may with the best of intentions set goals, there are certain goals which are not going to be accomplished. There are certain milestones that are not going to be met. There is a tendency in these cases to point a finger or blame a particular individual for the fact that a program is lagging or is not on schedule. Often a manager feels that an individual is engaging in activities which are not contributing to the overall objective, and obviously this is true in many cases. As a result, there is an inclination on the part of the manager to view such actions as a lack of interest on the part of the employee and oftentimes this is an erroneous conclusion. Usually this means that individual accountability has not found its way down into the individual feelings of the employee.

Too often we assume the fact that because responsibility for a particular phase of a project has been delegated, that this will automatically assure success. This is no more true than thinking that setting of objectives will automatically result in accomplishment. This question of responsibility and accountability has been defined in many ways and perhaps in general we can say that delegation for responsibility is a downward process from a manager to a subordinate.

The manager states to the subordinate what he wants him to accomplish. Accountability, on the other hand, indicates the sense of obligation for accomplishment of results going from the subordinate to the manager. Basically, we are saying that for any accomplishment to be present the individual must put his whole being into an effort, and it must become a part of his daily life. It must be more than an 8 to 5 job. The individual who is working for a manager under a true and effective system of accountability *must assume the obligations to get results. He assumes the accountability for both positive and negative results.* Otherwise, the concept of responsibility becomes merely a concept. Accountability is the very life blood of an organization and it is this accountability that the manager must emphasize and must attempt to build into subordinates. We look at this in terms of other concepts such as give the extra 10%, the man who goes the extra mile, and etc. Without this type of an approach, accomplishment is seldom possible.

Dealing in the educational scene we are generally looking at a group which by and large can be classed as professionals. In dealing with groups of this type certain problems are presented which are not normally presented with people in other disciplines. As an example, the professional may feel that his particular activity is more important than the specific results which will contribute toward effective implementation of a plan. Often, he feels that professionalism comes first and the ultimate contributions are somewhat secondary. When situations of this type occur, chances are quite good that the individual has never in his lifetime been made accountable for performing his particular part of an operation. An individual in this particular predicament will automatically feel that he can avoid personal *ACCOUNTABILITY FOR RESULTS by substituting accountability for a particular activity.* The unfortunate part about these situations is that often a well qualified individual loses a great deal of his effectiveness. *Some very excellent and well qualified men have been misguided because no one held them accountable for a specific objective. They were held only accountable for a particular activity.* It is for this traditional reason that accountability becomes an important factor. Accountability basically forces the individual to plan his programs and to specify clearly his objectives before he requests program approval. Without accountability, it is difficult to focus in on results. *It is essential to focus on results rather than on activity.*

Too often you hear the comments that it is not possible to find a reasonable way of measuring progress of an individual or of a particular program. However, the chances are fairly good that if the yardstick of measurement cannot be defined, there might be some good reason for either changing the scope of a program, or re-evaluating it in light of some means of measurement. Any idea which is proposed, is proposed obviously with the intention that some accomplishment will be achieved. Many ideas require considerably more thought before they can be rightfully established as a program.

A manager's appraisal, of the degree to which an objective has been met, will obviously result in some form of criticism of the individual if the results are less than expected. As a result some general comments on the concept of criticism. It seems that in our American society that criticism is a bad word. It is something we should stay away from—it is something we should not do—whether we criticize subordinates or superiors we for some reason look askance at behavior of this type. However, criticism is a constructive and necessary way of improving a person. It must be used properly. It must be used diplomatically. Further, it must be used with good judgment and it cannot be used in the same manner on each individual.

If the employee is not measuring up to standards, if he is not meeting his objectives, something must be done about it and it must be done promptly. You do not perform a favor to the employee by allowing him to excuse himself for failure of performance. This, of course, is based on the assumption that the objectives of the individual are within the realm of performance and further, that the objectives are not based on 60 hour work weeks. We are all aware of the fact that many requests are made for services from managers and to managers without much regard for their existing work schedule. The question further arises that when objectives are set, a time schedule is also established, and the manager may because of certain priorities have to alter the overall time schedule. However, we mention this here because it is an item which is continually overlooked by many managers.

Criticism can be used as an effective training aid. If an individual makes mistakes or fails to carry out a particular objective, as originally planned, you must tell him what he did wrong, assist him in attempting to correct his error in order that he may learn. This is not an easy thing to do. Most human beings dislike being told that they have made a mistake. The fact remains if a mistake has been made, it should be called to his attention. Further, in bringing up the mistakes of an individual this will automatically tend toward better two-way communications. While we all shun conflict and differences the fact remains there can be little understanding without some conflict. Perhaps some of the mistakes the individual made were a result of a breakdown in communication. Criticism must be leveled in such a way that the manager convinces the employee that he is pointing out his shortcomings because he is interested in him and in his improvement and advancement as an individual. We must be cautious in these areas because too often a manager will put on a false face and his actions regarding the employee do not coincide with what he says. Criticism should not proceed to the point of resentment. If this situation occurs, the manager must further get to the root of the problem.

The Manager

If the educational community is to make any significant advances in the near future it must change its management techniques. The concept of an administrator should be changed to one of a manager—a manager who is not responsible for performance of tasks but responsible for results and accomplishments.

These are just some general requirements that are part of the responsibility of a good manager. (1) The manager sets objectives. (2) The manager trains his people. (3) The manager develops men. (4) The manager monitors progress. (5) The manager counsels. (6) The manager stimulates and motivates. (7) The manager calls his people to an accounting. There are obviously others. The responsibility of a manager relates directly to the subordinate. Basically, the manager has the responsibility to perform his functions in such a manner as to make his people successful. It is not just his responsibility of seeing to it that each person achieves the results that are expected, but that this person grows to the maximum of his potential, both for the good of the individual as well as the institution. This philosophy should prevail from the lowest man on the ladder to the highest, for it is only through development of men that a manager is able to function effectively. As was previously stated, he cannot do it himself. His responsibility is to manage and that means to accomplish through others.

It is probably true that the majority of managers have a tendency to gravitate toward the work which can be easily accomplished and toward the work which they like to do. It is thus necessary for a manager, in the day-to-day working operations with his people, to change emphasis often and to place emphasis where it is needed. We often find a situation where many minor items of a particular program will be pushed with the illusion that a considerable amount of work is being accomplished. It is easy to feel secure in a situation such as this because accomplishments come over a relatively short period of time. In dealing with work activities which are rather diverse and constitute a variety of work, it is easy to lose the proper perspective. As a result it is possible for a manager to have an excellent group of employees and a considerable amount of work being done but with a very limited level of accomplishment.

We are all aware of the situation where a plan of attack may be developed to solve a particular problem and the individual milestones as established may be met, yet the complete program can be a dismal failure. It is quite evident that emphasis cannot be placed on many phases of an objective at one time and we realize that the emphasis must shift depending upon the many unknown as well as uncontrollable factors that cause the best laid plans to go astray. A good example of this was recently provided when a researcher emphasized the number of tests and analyses completed. The very number and varieties of these tests seemed to lend them considerable importance and credibility. It was obvious for the researcher who carried out these tests according to schedule to conclude that his total accomplishment was in performing the many tests and analyses. However, there were two important considerations which were completely overlooked. First, the series of tests performed did not lead to a usable data, and secondly information which the data contained was never developed. This condition occurred primarily because the manager did not adequately state and clearly define the major requirements of the research. While it is true that these tests represented some research contributions, the fact remains that no final tangible results were possible.

The manager in many cases should look at himself as a resource person. He should be an expert in communication, and he should be a catalyst for his entire group. His primary responsibility will be one of assisting rather than directing and of maintaining a line of communications both up, down, and laterally instead of merely transmitting orders. He must further be aware of the fact that he will, of necessity, be forced to make decisions in areas of complete ignorance and that there is always something for him to learn from others. The manager should realize that others can probably make useful contributions, that human problems are usually more situational than personal, and that situations need to be explored with the people concerned. It is not possible to apply a formula to the process of management. There are no pat answers and anyone who attempts to use pat answers on different personalities will only find that he will aggravate the general problems that are associated with management. One of the most difficult problems that a manager faces is that of being truly objective. This is not only a difficult problem for the manager, it is difficult for people in general. Unfortunately, from the time of birth we immediately become prejudiced for or against certain things and basically these prejudices have a tendency to give us or lead us to knowledge which may not be necessarily accurate and complete.

Attributes of a Good Manager

What are some of the attributes of a good manager? A man usually is interested in management because he desires responsibility and someone in authority feels he has an aptitude for exercising the managerial function. Responsibility properly placed will provide a strong motivating force for the manager and it should give meaning to all of his activities. This responsibility must be given to the manager with the authority. For responsibility without authority generally generates an irresponsible attitude.

The manager in the educational scene must possess sufficient insight in order to set a proper group climate. This is his responsibility and he sets the pace for his own people. A proper insight on the part of the manager should provide the climate to develop an attitude which will make things happen. This will vary from group to group obviously depending upon the type of work to be performed. However, the spirit of an attitude is oftentimes caught rather than taught. A group of people working in an environment where growth is possible and results are tangible can develop the proper attitude. It is one of the fundamentals of industrial psychology, that men would like to follow a particular leader and they want a leader who exudes enthusiasm.

The manager has a responsibility to attempt to generate a healthy, yet controlled discontent with the status quo. This discontent can be generated in a number of ways. Some people create this attitude by asking the question "why," and if all personnel would ask themselves the question "why am I doing this particular thing," many hours of work would be conserved daily. What percentage of work could be delegated to somebody else to free the manager for more important responsibilities. We could all probably learn a lesson in this area, if we gave some thought to reduction of paper procedures. How many reports are written that enter the circular file? How much information that crosses the desk daily is really of any value? How well are meetings planned? Small items, yet when looked in a total, represent a very large effort.

We are all creatures to tradition and habit and we generally fight the individual who wants to change our pattern of living. This even pertains to teachers as well as school administrators. It extends to such small items as parking on the North or the South side of a building, using a particular entrance, or attempting to routinize certain paper procedures. There is a contradiction in many areas, however, when we attempt to achieve results which have never been previously accomplished by the same old methods as we did in the past. If we are to accomplish the unexpected, the unexplained, we must certainly expect to employ methods which have not been attempted previously.

There is considerable discussion regarding the areas of innovation at the manager level. Very much like the technical specialist, managers occasionally feel that they become completely boxed in by the organization-man concept and that certain built-in forces regulate their decisions which tend for conformity. Once again, look at the situation here and refer back to the individual. There are many ways of doing things in the nonconformist or creative fashion. How a man does this will determine the success or failure of attempting to influence behavior by unorthodox techniques.

It is obviously the managers responsibility to reduce the risk and the uncertainties, but this is not to say that he accomplished this by discouraging originality or by attempting to minimize the unexpected results. The attitude that one must conform in order to survive, thrive, or prosper in an organization and that creative innovations are inhibited in most cases is nonsense. If a man finds himself in this position he has no alternative except in good conscience but to look elsewhere. Many studies look at creativity and conformity at opposite ends of the pole and this, however, leads to much confusion. There is probably little relationship between creativity and conformity. There is a relationship, however, between independence and conformity and creativity and noncreativity.

Some Thoughts

It appears that our society is changing from a profit-centered economy to a people-centered economy. Perhaps we should change to a competitive society! Many will argue that we are in a competitive society but are we? In recent years, social scientists have convinced many managers through their writings and publications that a manager should not show authority. The manager is basically taught not to raise a little bit of proverbial "hell" with an individual who is not performing. It is not the intent to argue that democratic procedures are or are not workable. It would be difficult to provide a program of growth, if management would request that employees vote on important issues. In a similar fashion the manager in charge of a group is not in a position to poll the members of a group and function on a basis of majority rule. This is not to downgrade or to minimize the practical value of human relations. However, the manager-employee relationship should be on a sound footing and should be based on concepts that will develop mature individuals. After all, intelligent adults should be capable of realizing their responsibilities and capable of fulfilling them A boy does not become an adult by constant acquiescence of certain permissive action. An athlete is not trained through coddling, a musician is not trained through coddling, a professional is not trained through coddling. He becomes a professional because someone insisted on high level performance. You cannot train adequate subordinates by eliminating from them accountability for effective performance.

Achievements in our twentieth century are not accomplished through perpetuating an attitude of mediocrity. On the contrary, they require the greatest of mental and physical discipline. We often forget the trials and tribulations of a Madame Curie or an Edison or the struggling required to reach maturity. In essence, we can summarize this concept by saying that a manager should adopt basically a no-nonsense policy. This does not mean that he becomes arbitrary or becomes impersonal. On the contrary, if he is to adopt the no-nonsense policy, he must be exceedingly personable.

The continued growth of educational institutions is bound to create further difficulties as time progresses. Total personnel as well as capital equipment and facilities continue to rise at a very rapid rate. As a result the complete environment and framework in which these activities are conducted today has changed drastically. We can expect even more drastic changes in the future with the shortage of personnel and the increased cost of acquiring and maintaining competent personnel.

The degree of complexity that faces most educational systems today far surpasses that of anything in the past. While we attempt to fight complexity and spend many dollars for expansion of facilities and programs the fact remains that most problems today that are worth solving are usually complex. This is why the manager must develop the creative capabilities of his personnel. It is no longer possible to meet today's requirements strictly by hard work. The work has become considerably more sophisticated and no longer is an individual capable of meeting significant objectives on his own. As we attempt to propose concepts for planning educational functions, the question arises—how do you plan the complexities of the human mind? How can you plan thinking? How is it possible to say that in 90 days Joe Smith will accomplish a particular objective? The best we can do at the present time is to make an intellectual guess, and while we use the word "guess," this is where the manager must use his judgment and this is where the manager must be capable of performing effectively.

When a manager is working in areas which are new and novel he must be aware of the fact that perhaps his past experience might be of somewhat doubtful value. This is not to say that he must ignore past experience, but he must scrutinize all phases of his program to determine whether or not the conclusion that he draws, the similarities that he is attempting to evolve, are realistic. This, once again, only emphasizes the need for leadership taken by the manager. He must demonstrate to his subordinates the need for setting specific goals and objectives. The average individual given the necessary leadership, will respond enthusiastically to the cause generally.

What Does a Manager Do

What does a manager do? A manager performs many functions which are not related directly to managing of work or managing of personnel. The fact still remains that there are important functions that must be performed and as long as they must be performed they should be performed well. They represent a responsibility that every manager faces daily regardless of what position he maintains within a particular organizational structure. However, this does not prevent us from isolating the particular functions which a manager performs because he is a manager.

It is possible for the manager to improve his performance as a manager by improving the performance of these particular functions which are established as the basic requirements of a manager. In the first place, it is the manager's responsibility to set objectives. He basically determines what work must be performed, how it must be performed, what standards must be met in the performance of the particular assignments, and what the final time schedule is as well as the dollar amount that has been allocated to performing this particular objective. He makes these objectives effective by properly communicating them to personnel who are working for him and who will carry out the many hundreds and oftentimes thousands of details that are necessary to see a particular job through from conception to completion.

The manager has the responsibility of organizing his personnel into an effective operating team. He analyzes the activities and is the individual who has final responsibility for the decisions required to bring a project or program to successful completion. Perhaps one of his most important functions here is that he selects the necessary complement of personnel with the qualifications to do the job. It is in this area which is oftentimes regarded as somewhat minimal that he must spend the majority of his time if he is to perform his job effectively. It is not the manager's responsibility to try to do the work by himself. This is another elementary proposition that everyone endorses yet at the same time violates daily.

It is not the manager's responsibility to be in competition with his men for ideas, for concepts, or methods of approach to a particular problem. It is his responsibility, however, to provide leadership so that personnel assigned to him perform effectively. He further creates the necessary environment for growth and provides challenging work. It is not possible to stress to too great an extent that the effective manager works through others. While he delegates certain responsibilities for a particular project or a particular phase of a program, the manager still has the final responsibility and is the one who must answer the questions if the program is unsuccessful. Many times the comments have been voiced such as "but my subordinates are too young and inexperienced." However, it is the manager's responsibility to develop his men. This includes developing their initiative, their resourcefulness, and their judgment. While these are simple concepts and simple statements, accomplishment is not an easy task.

"I'm not interested in the details," is a comment which is expressed on many occasions. Perhaps there are times when the manager must become involved in details because many times the details are not trivial. The details may perhaps represent the success or failure of a particular program. At the same time the manager must be aware of the fact that he cannot devote himself to details which can be handled effectively or which can be used to challenge the individual who is working for him. The manager who is working effectively will also adopt the policy of putting *FIRST THINGS FIRST* in the areas where he must utilize a large percentage of his time. It is necessary that the manager attempt to cultivate this attitude in his subordinates.

A corollary to the *FIRST THINGS FIRST* concept is a need to develop the capability to boil complex matters down into their simplest forms. While the facility for reducing apparently complicated problems to the essential elements might be considered as the gift of wisdom, the fact remains that the manager must continually strive to reduce all problems to their simplest form. Another way of saying it is, "get back to fundamentals and don't try to plug the figures into a handbook formula." Many managers have a tendency to cloud the major issue situation or as others have said, "muddy the water" by becoming over-complicated without getting down to the root of the problem. This is a situation which exists in all levels of management and often the manager is the one who is responsible for creating the confusion. It is the responsibility of the manager to integrate, to condense, to summarize, and to simplify facts rather than to expand, complicate, and disintegrate. The effective manager will bring people back to the main course of events and focus of the problem by attempting to summarize what has or has not been accomplished.

Reduction to simplest terms is a form of mental discipline which instinctly impels a man to go down to the core and get at the crux of the matter. The manager must be in a position to view emergencies with the necessary calm and with the ability to get to the root of the problem. Many times employees have been thrown into a state of confusion, into a state of agitation, practically bordering on panic, because of a particular minor crisis. It is the responsibility of the manager to use his good judgment in determining when a serious crisis really exists. It is easy to cry "wolf" and get departments completely panic stricken without really looking at what the problem might be. It is the manager's responsibility to be sure that the information, and the sources of information are dependable and, if necessary, verify many of these problems himself before he becomes actively engaged with any of his subordinates in attempts to solve them. The important thing, basically, is to get the facts first in a prompt and direct manner and then to act on the basis of this evidence in a responsible and managerial way. When the manager makes a decision, it should be a final decision based on available facts and not on heresay. It is his responsibility to make the judgment after he has eliminated sources of misinformation.

Another element in the work of the manager is the job of measuring performance. While many of the concepts which are discussed in management by objective require that the individual and the manager agree on the particular yardstick for measuring the progress, the fact still remains that the manager has the responsibility for establishing the yardstick. It is his responsibility to convince the individual and to motivate the individual in such a manner that the yardstick for the particular program is based on sound judgment and available facts. The manager sees to it that each man in the organization is aware of the manner in which he will be appraised, and have knowledge of the scale which will be used for measuring his progress and his performance. He further analyses the performance, he appraises it, and he interprets it, and as such, he has a responsibility to communicate this information, not only to his superiors, but to his subordinates as well. For his prime objective here is to keep subordinates aware of how they are going to be measured in regards to their particular performance.

Measurement of performance according to some realistic yardstick is too often disregarded by managers. Measurement represents a certain amount of control over the individual by the manager. It is here that it becomes necessary that the manager not dominate the individual, not try to instill his own personal thoughts and thinking into the individual, but use every available faculty at his disposal to convince and persuade. We often hear such cliches as "no control is the best control," and comments of a similar nature; however, the facts of life in the competitive social situation do not permit a manager to function effectively without some control.

If a manager looks back on his own performance over a period of time and realizes that the personnel within his particular department are not capable of meeting the objectives that may be set by higher management groups, he only has himself to blame. This is really an appraisal of his own performance and skill with which he performed in the past. The ability to set objectives does not make a man a manager, and as Peter Drucker has added, "no more than a man who is capable of tying an exceedingly small knot makes this particular man a surgeon." However, without the ability to set objectives, without the ability to boil matters down into their simplest forms, a man cannot function adequately as a manager.

The manager also has a further responsibility of developing people, and he may do this in many different ways. It is not possible to set a specific technique for developing of subordinates. In the final analysis a manager either directs his people towards specific objectives or he misdirects them. He either brings out their best capabilities to the forefront or else he stifles their initiative. It is true, however, there are exceptions, where regardless of what the manager may do, the individual does not respond. In these cases the manager has no alternative except to take drastic action. A manager must require a certain level of performance, and this should not be a minimum level. For as time goes on, the minimum level producer seldom, if ever, produces effectively unless properly coached and counseled by the individual manager.

Whatever a manager accomplishes through subordinates, he accomplished through making decisions. Many of the decisions may be routine, many of them may be complex, many of them may be based on an absolute minimum of information. However, it is his judgment which finally determines what the particular decision might be. The decisions which we are concerned with are not trivial ones such as, how many telephones in a particular department, or how should the desks be placed, or who is going for coffee, and the other decisions perhaps regarding social and cultural etiquette. The important managerial decisions should be related to: the interpretation of a particular set of facts; determining whether the information in the first place is fact or fiction; determining what human and material resources are available; and subsequently, whether or not he is a responsible individual to make the final decision.

Much of the managers time is spent in determining what is the question rather than what is the answer. This is just another way of saying "define the problem." Unfortunately, on too many occasions we do not allow sufficient time, as managers, to truly define the problem, and we seek the answer before the problem is adequately defined. Introspective evaluation of self, looking back at our decisions daily, provides the answers to how often the wrong question is answered. Defining the problem is the first step toward a decision. Often what appears at first to be the problem often develops into relatively irrelevant piece of information, and does not really represent the symptoms which the manager is seeking. The majority of texts written on management emphasize these concepts of taking sufficient time to define the problem. However, too often the manager while tacitly agreeing with this concept only gives lip service to the concept.

In the analysis of a particular problem it is imperative to determine what data is relevant, what data is not relevant, *WHAT INFORMATION DOES THE DATA CONTAIN.* The manager selects important information that allows him to dismiss the irrelevant and concentrate his efforts on the important. When we think in terms of giving the facts, as is often stated and which generally represents the first commandment in most textbooks on decision making, we should remember that this is only part of the job. It is the use of these facts in the proper sequence which makes them valid. The manager in making many decisions will not have all of the facts at hand, for the simple reasons that the information is not available or that there is insufficient time or money to obtain it. In many decision making problems the manager is dealing with the unknown. He has insufficient facts. It is necessary for him to use his judgment, and his past experience and the information that is available. When information is not available intelligent guesses must be made and only subsequent events will determine whether or not the initial guesses were right or wrong. However, this does not release the manager from his responsibility of making the decision, for as any program continues it is necessary for the manager to continually review new information which may affect his initial decision.

The next step in any program is to develop alternate solutions. Once again, this is an easy concept to extol yet not very easy to put into practice. Seldom do we find a situation where we have an either/or type of situation. Most decisions lie in a wide gray area between black and white. There is no solution which embraces all of the positive aspects of a program, no more than there is a solution which embraces all of the negative aspects. Alternate solutions must be considered but seldom is there time and money available to determine the validity of these solutions. However, if alternate solutions are investigated the probability exists that a better decision will be made. Once again, the alternate solution is only another tool for the manager, a backup for the manager in the event that the initial solution fails. Knowledge of available alternate solutions reduces the need to push the panic button.

Many times the situation arises where the manager feels that in order to make a decision he must act. It should be considered here that many times the best decision is not to act at all. This is not to advocate the philosophy that if you leave something sit long enough the problem will go away. The extent to which alternate solutions are investigated is the responsibility of the manager. He finally makes the decision as to which direction to go. In the majority of cases, there will be more than one adequate solution, and it is up to the manager to approve the particular solution depending upon the risk, the timing, and the physical as well as human resources available to him. However, a word of caution should be cited here for the manager. Where objectives are set for subordinates, the *methods of solution to problems should not be outlined to such an extent that no challenge exists for the subordinate.* If the manager is going to provide the individual with all of the answers, it is really not necessary that he have well qualified subordinates on his staff.

When alternative solutions have been established and a method of solution has been determined it is then the responsibility of the manager to put the wheels in motion, to see that the program is carried out according to the particular solution that has been determined. In the area of decision making the manager must also be cautious not to fall into the security trap. It is possible to make decisions in such a manner that there is absolutely no risk. In a competitive social system chances must be taken and many times these chances must be bold and they must be courageous.

The manager who finds himself in a secure position will eventually find that another individual, perhaps within his own organization, has demonstrated the necessary courage and boldness to come up with new and novel concepts. It is the responsibility of the manager to "stick his neck out"—it is the responsibility of the manager "to get out on a limb." It is the responsibility of the manager to set high goals and not settle for anything less. However, on the other side of the coin, it is the responsibility of the manager to work aggressively with his subordinates to reach these goals and objectives. The manager who does not create his own emergencies in advance can be sure that as time passes others will create them for him. In regard to the whole concept of planning we often find ourselves in a position where a particular plan is developed, but there is little followthrough. While this may sound like a cliche the fact remains that the old concept of *PLAN YOUR WORK AND THEN WORK YOUR PLAN* will result in the successful completion of many programs.

A Technique

The following sequence of events represents a technique which can be used for carrying out many programs, and if practiced, and practiced to an extent which is realistic, would eliminate the pushing of the proverbial panic button. Many will say these concepts are old hat, but how often has the manager found himself in trouble because he ignored these concepts which seem so obvious and almost trite. They are listed here as follows:

1. Define your objectives and be specific about them. Assign priorities based

on payoff—both human and material.

2. Plan the particular job to be done by outlining the steps to be accomplished in detail. Too often plans are too involved and too broad. They are not defined sufficiently.

3. Prepare a definite schedule. This schedule should be meaningful, it should be based on fact, not fiction. It should not be based on such facts or such concepts as "I don't know where we are going to get the time, but we are going to have to do it."

4. Assign definite responsibilities for each act to a specific individual and hold him accountable.

5. Provide the necessary personnel and facilities to augment a program. Too often managers are not willing to go to other departments or to outside consultants for the necessary help that is needed. As a result many hours and many dollars are spent in reinventing the wheel.

6. Provide a means of follow-up on all work which has been assigned. It is perhaps advisable in many cases for the manager to take the necessary time to witness particular operations and to verify the results himself.

7. If it becomes necessary to revise a schedule because of certain particular problems, then do so.

8. As any one who has ever managed a program realizes, there are many items which have a tendency to lag behind in a particular operation. Whether we classify these as missing links or lagging items or bottlenecks or confusion or whatever particular title we care to give them, it is usually these small items which will create the problem.

9. Keep in mind that once a schedule has been set and a completion date has been established that this completion date is important. Too often we find ourselves saying that the completion date can be moved plus or minus 60 days and etc. without really taking a realistic look. However, we should keep in mind that when the initial finish or completion date is set that we have a responsibility to meet it, but it must be faced realistically.

The concept *SETTING GOALS for PLANNED RESULTS* goes far beyond the basic set of rules or procedures or method of managing. The concepts do not provide the manager with a sure means to success nor will it simplify the problem of managing. Basically, the system of *SETTING GOALS for PLANNED RESULTS* is a concise and explicit statement of what is involved, what is expected of every individual involved in a particular operation and what system of measurement will be used to determine the level of achievement.

Communication

We are all aware of the problems involved in communications and sometimes we have a tendency to minimize these. Yet, it is not often that man when questioned on a given assignment will understand the full meaning of his assignment. Perhaps this simple example can be used to demonstrate the problems associated with communications. If one was to ask a member of the 3M Company in the St. Paul area, where he went to school, the chances are fairly good that he would say that he went to the U. of M. If a man who was a resident of Michigan working for the 3M Company was asked the question, he may say that he went to the U. of M. If a man working for the 3M Company from Maryland were asked the same question, he may say also that he went to the U. of M. Yet all three individuals would be speaking of totally different universities, namely, Minnesota, Michigan, and Maryland. Granting that this is a simple example, yet it demonstrates clearly the difference in word usage.

Recently, the president of the American Management Association presented a series of programs on TV regarding the functions of management. He related in his early messages, the fact that he had once instructed a man to build a fence, and was completely dismayed when he had seen the results. He used this as an example to clearly demonstrate once again the problems of communications. He told the man to build a fence, without any further instructions. Unfortunately the fence looked nothing like Mr. Appley anticipated. He did not adequately communicate his perception of the new fence.

Managers generally have a tendency to feel that they have fully explained what they expect of others. In doing this, however, they view this explanation through their own eyes. They look at this explanation with a background which the individual to whom they are communicating this information does not possess. There have been cases where a manager has asked the individual to repeat the nature of the assignment to be performed. It is interesting to note how often the individual and the manager did not have the same concept in mind. It is for this reason, it is necessary to stress that, the manager and the individual performing the work have a clear understanding of what the objectives of the particular program might be. It is like Mr: Appley had said to the employee, "build a fence" without going into any details as to how and what configuration the fence should take. He assumed that he and the employee were on the same wavelength.

FEDERAL-STATE RELATIONSHIPS AND EDUCATIONAL PLANNING

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Future directions in Federal-State relations are an increasingly pervasive concern on the political scene and in the educational community. For corroboration, one needs but turn to the current campaign, the pending Intergovernmental Cooperation Act, the focus of the Study Commission of the Council of Chief State School Officers, and a host of similar examples.

At the 1968 National Governors Conference, consideration of planning was introduced as follows:

> *With the advent of increased Federal participation in State and local affairs through growing grant-in-aid programs and in view of the rising cost and complexity of solutions to modern problems, the storm of debate over the role of State government in our Federal system has intensified.*
>
> *The question is not whether States will survive—rather the issue is how best to maximize their contribution to a united country, to guarantee the diversity which States provide, and to maintain the needed balance in a society where the role of government is enlarging.*

Here, in the Governors' own words, is a concise statement of the situation facing the States—an appropriate base for launching a discussion of responsibilities for educational planning.

A brief historical review gives perspective to the roles of Federal and State governments in education.

In our Republic binding independent States together as a Nation, the Constitution reserves to the States those powers not delegated to the Federal Government. Thus, by omission, the States retain legal responsibility and authority for establishing and maintaining programs of public education.

The Constitution also gives the Congress the power to tax and to spend such revenue to promote "the general welfare." From that phrase the Federal Government repeatedly has derived the legal authority to come to the aid of education when States and local communities were unable to carry the full financial burden.

As early as 1787, the Federal Government set aside millions of acres of land for the public schools. In the 1860's, additional land was provided to endow colleges that would develop agricultural and technical programs. In 1917, military obligations created extraordinary manpower needs and the Federal Government responded with aid for vocational education programs.

The massive defense effort in the early 1940's prompted aid to school districts where activities of the Federal Government had removed real property from the taxing potential of local governments.

Just 10 years ago, the shortage of manpower to cope with a rapidly expanding scientific technology and to communicate with other countries caused nationwide concern, resulting in the National Defense Education Act. In 1960 and 1963, the Federal Government initiated assistance programs for higher education and expanded support for vocational education. In 1965, the Elementary and Secondary Education Act emerged to provide financial aid to education in amounts approximately two and a half times greater than any previous Federal enactment. And, more recently, the Congress has acted to renew and substantively expand Federal assistance programs.

From the viewpoint of State education agencies, and more particularly, educational planners within those agencies, NDEA and ESEA are milestones in the evolution of the Federal interest in education. These programs have materially expanded the responsibilities of the State agencies and concomitantly afforded them new opportunities for carrying out these responsibilities for both Federal and State programs.

Traditionally, Federal aid to education has been categorical in nature, intended to meet specific needs of national concern. Also it has stemmed from a manpower motive, to provide needed human resources in the national interest. A marked departure from manpower development in the traditional sense, ESEA recognizes the broader need for self-fulfillment by all citizens in a vigorous Nation.

Both characteristics of Federal aid to education—its categorical structure and manpower thrust—are germane to the principle of "general welfare" and the power derived therefrom. The extent to which the Federal Government will continue to exercise this power depends in large measure on how well the States discharge their responsibilities in providing educational opportunities.

Since the early 1800's, State governments have attempted to assure equity and quality in education by requiring compulsory attendance, licensing teachers, prescribing minimal contents of instructional programs, and providing State grants-in-aid to equalize financial support among local school districts. Not surprisingly, no two States have developed identical organizational structures for elementary, secondary, and higher education. For example, States differ widely in their methods for selecting the head of the State education agency. In 23 States, the chief State school officer is appointed by the State board of education; in 5, the Governor appoints this official; and in the remaining 22 States, he is elected.

State financial support for public schools has increased dramatically within the last 10 years. In 1955-56, State aid provided approximately $3.8 billion in support of elementary and secondary education. In 1966-67, this figure had increased to approximately $10 billion, or roughly 50 percent of the annual operating expenditures for elementary and secondary education.

It has been argued that some States have failed to discharge their responsibilities for education because of limited and unequal economic resources. If so, this situation conceivably could be corrected by Federal grants-in-aid. However, it also is purported that some States would be unwilling to assume such responsibilities even if they had sufficient economic resources to do so.

In my opinion, State governments will be the most important factor in charting the future course of Federal, State, and local relationships in education. Indeed, the State has the vast middle "piece of the action." The Federal Government has demonstrated that it can and will intervene in providing financial support for public education when the States fail to meet national needs. And

State governments cannot rationally blame their educational shortcomings on local school districts, for States themselves have created those districts and are responsible for them.

Education then, is first and foremost a State responsibility for which, over the years, a compatible policy has evolved for Federal involvement. That policy, in general, is to provide financial assistance to support improved educational opportunities for individuals in an educational system established and structured separately by each of the 50 States. Under this policy, the Federal Government has also provided financial assistance to meet the educational needs of students enrolled in private institutions.

Granted that the preceding statements oversimplify the complexities of Federal-State relations in education, it is hoped that this treatment offers an appropriate context for considering educational planning. Through this Institute, you have grappled with the problem of precisely defining the planning function. For my purposes, planning for education at the State level is a technical process involving the systematic application of rational empirical methodology to the task of identifying and resolving the persistent and compelling problems of education within a State.

Obviously, such planning must reach out into the political environment and managerial processes of virtually all agencies of State government. My comments, however, will be related for the most part to planning activities within a State education agency, which may or may not pertain directly to a more comprehensive planning function within State government. Unquestionably, any significant effort to improve educational planning must rely on the responsibility and authority of a State department of education.

Some comprehensive planning takes place in State education agencies regardless of whether a component has been structured and formally charged with this responsibility. For example, a legislative program for education and a budget are submitted by the executive branch to the State legislature. Both of these measures obviously call for a degree of either formal or informal needs assessment, strategy building, and other elements of the planning process.

The complexity of effective educational planning demands a less arbitrary solution. A single unit staffed by technically proficient professionals with agency-wide responsibilities for planning would seem the most feasible alternative.

An obvious question follows: What is the role of a planning component in a State department of education? Or, more precisely, what is its appropriate sphere of influence in view of intra-State and Federal-State relationships?

In these sessions I am sure you have considered a myriad of answers. Such a planning capability offers States a chance to act, not just react. It enables them to identify their unique needs, formulate educational goals and priorities, and devise strategies that are efficient, effective, and relevant. Finally, through comprehensive planning on a statewide basis, States can employ discretion in using Federal and State resources. Despite categorical fragmentation, States can mesh Federal assistance with their own financial effort to provide a cohesive structure for educational development.

What outside influences can State educational planners expect? Attempts to answer such a question are fraught with inherent dangers. But I have tried to draw some logical conclusions from discernible trends.

First, the future investment of the Federal Government in elementary and secondary education will increase. The vehicles for delivering such aid to the States will, in the next four years, be a continuation of categorical grant-in-aid programs. However, the categories will be broader and more flexible than in the past. An effort will be made to permit State and local agencies to present substantive plans for educational improvement in support of which Federal money can be used to fulfill the legislative intent.

Second, Federal legislative specifications calling for more rigorous planning, more complete strategy development, and more thorough evaluation will be considerably tightened. Conversely, the final products or services will be less rigorously mandated.

Third, public education will continually be challenged by new and more complex issues. Hardly a day passes which doesn't give rise to a new confrontation, a new polarization, a new controversy. One that has recently emerged presents perhaps the greatest potential threat to public education of all the serious issues within the last 10 years. This is the demand of some militant well-organized groups that the conduct of elementary and secondary educational programs be turned over to private enterprise.

In order for our educational system to sustain and adequately renew itself in these periods of highly accelerated change, it must be fortified with a viable planning capability. The scientific and technological capability to handle our problems is currently available. History may well record that during the 1950's and 60's this Nation was making its greatest leap forward in the creation of scientific and technological know-how. But at the same time, it was standing entirely still in effectively using this know-how to solve social problems. I firmly believe that our survival depends to a major extent on our ability to successfully use technological achievements in diagnosing and curing our social ills. Obviously, only a strong planning capability can achieve this necessary end.

Finally, State governments must present a more harmonious and consistent political position regarding the return of Federal revenue to the States. Presently, there are possibly 82 Federal categorical programs providing funds to State governments for activities including planning. These range from planning for the construction of super highways to planning for the building of outdoor privies in rural areas.

There must be some manner of coordinating activities supported by both Federal and State governments into a consolidated and systematic approach to meeting the major societal needs of the State. The emerging Federal-State partnership will strive to promote such a cohesiveness. It will not come about, however, without considerable stress and strain. I look forward to the time that State governments will gird their loins, pick up the necessary armor, and enter forthrightly into the conflict.

The broad "middle" position of the States is strategic. Viable State education agencies with technically competent planners, aided by greater flexibility in Federal legislation, will be the secret to making the Federal-State relationship in education truly creative, providing maximum benefits to our youth through better educational programs.

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COMPREHENSIVE STATE-WIDE PLANNING TEXAS MODEL

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Mr. Charles Nix served as a high school assistant principal in charge of guidance and pupil personnel before becoming a guidance consultant for the Texas Education Agency. Following his work in guidance for the Texas Agency, Mr. Nix became a supervisor for Title I evaluation of projects for the state and then assumed a position as research and assessment director in the office of planning. Presently he is the associate commissioner for planning. He is a well known expert in the planning field and has served as a consultant to numerous state and local educational agencies.

A great deal of attention is being given to educational planning, and many of us are trying to establish for ourselves and for our associates just what educational planning is—what its outcomes are, and what some of its techniques and procedures are. A primary focus of this attention is upon what we term statewide comprehensive planning, particularly the type which is done, or should be done, by state departments of education.

In our efforts toward comprehensive educational planning in Texas we have developed several assumptions about planning:

1. Planning is a cyclical series of operations which results in the collection and interpretation of information, decisions about "best" courses of action, allocation of resources to implement the courses of action, and re-planning, or renewal, of the program on the basis of evaluative information.
2. Planning and evaluation are the two major complementary aspects of the planning cycle: planning is prediction; evaluation is analysis, leading to further planning.
3. The term "comprehensive" is a relative term, and is not possible of full achievement. One can only move in the direction of *more* comprehensive and long range planning.
4. Statewide comprehensive planning has value only to the extent that it promotes and facilitates more comprehensively planned educational programs in local school districts.

The Texas Education Agency has been engaged over the past two years in a series of efforts to strengthen internal Agency planning and local school district planning. Four major thrusts in statewide educational planning have emerged.

Early in 1966 an Office of Planning was established to coordinate planning efforts of all divisions within the Agency through the use of several types of planning groups. It is important to note that the Office was not established to do *all* the planning; it was established to stimulate and coordinate planning done by all Agency divisions.

Although the establishment of a formal structure for planning was a major step, it did not automatically result in wholesale acceptance of Agency-wide planning. We have experienced some difficulty in defining what Agency-wide planning is in operational terms and in establishing the roles of the planning unit and other divisions. We had some problems in gaining acceptance of inter-divisional planning, in the sharing of ideas, the submitting of plans to inter-divisional critique. However, we feel we have come a long way. Over the two years Agency staff have become accustomed to the new style of operation and have come to see the value of inter-divisional cooperative planning in producing better programs for their divisions.

Once the internal planning machinery was in operation, the Agency was in position to move forward on a statewide front. From its inception, the Office of Planning had seen the development of regional centers as an important step linking state and local planning. Two developments made the time ripe for Texas to move in this direction.

In 1965 the Texas Legislature had enacted legislation authorizing the State Board of Education to establish state-supported regional media centers by September, 1967. About the same time that this legislation was passed, Congress enacted the Elementary and Secondary Education Act, one part of which, Title III, provided for planning and developing supplementary educational centers and services. The Agency very early decided that coordination between these centers and services and the regional media centers authorized by the State legislature would strengthen educational services across the State and make them more available to all schools. The Office of Planning was charged with carrying forward the planning to develop the regional centers.

Implemented in 1967, Texas' twenty centers provide a framework for involving all schools—large and small—in educational planning for the State.

The third major thrust to improve educational planning—development of a consolidated application for Federal assistance—resulted from the need to coordinate the many different Federal programs which were making funds available for educational programs.

Increasingly since 1965 it had been apparent that the fragmented patterns of Federal programs was making it difficult for local school districts to plan for a total educational program. Both local school administrators and the Agency were aware that working with some twenty-seven different Federal educational programs, each with its own set of regulations for funding, operating, reporting, and evaluating, was not efficient.

Consequently, at its April, 1968 meeting, the State Board of Education approved a single State design for Federal programs administered by the Board.

The design to "package" Federal funds, was developed by members of the Agency staff with advice from officials from local school districts and education service centers. The consolidated application for packaging of Federal funds which resulted from this design is being used for fund requests for Federal fiscal year 1969.

Because of the importance of the consolidated application as an instrument for educational planning, we might examine it in some detail.

Specifically the funds in the consolidated application—the package—this year are Title I-regular and migrant; Title II; NDEA III; V-A; and certain Vocational Education funds including Adult Basic. Other funds may be packaged as they become available. A consolidated application for these funds enables the school district to coordinate them for most effective use. However, the funds must be applied to the purposes and objectives for which they are by law intended. For example, when a district "packages" Title I funds it plans the use of these funds in light of a total program but it must expend them for disadvantaged children as required by law.

As a first step toward comprehensive planning and as an outgrowth of "packaged" funding, the consolidated application encourages *priority planning.*

Priority planning causes available resources to be focused upon educational needs of greatest concern. Priority planning depends upon thoughtful analysis of these educational needs and judicious priority setting among them.

The initial planning effort in the State is focusing on nine tentatively identified priority areas of concern for Texas education:

- Comprehensive pupil appraisal
- Programs for educationally disadvantaged people
- Early childhood education programs
- Vocational education programs as they relate to business and industrial requirements regionally and statewide
- Programs for the individualization of instruction
- Educational programs for handicapped children, youth, and adults
- Language skills development, particularly among the children who speak with inadequate command of standard English
- Adult basic education programs, particularly as they relate to occupational skills development
- School manpower development, both preservice and in-service

These areas of concern provide a framework for the local district's priority planning. The descriptions of the nine statewide priorities—available to school districts—are helpful to local planners in identifying local needs and in setting priorities—in selecting the major thrusts of their programs.

Education serves the needs of people. Consequently, educational planning must begin with the people to be served. The educational program—the curriculum, instruction, pupil services, and all activities that support these—must be reexamined and replanned, as necessary, to keep in tune with the changing needs of the people served. The consolidated application was designed to assist schools in these tasks.

The fourth major thrust in the planning effort was an outgrowth of the development of the consolidated application. A pilot project in educational planning has been initiated. Although one of the goals of the project is to assist schools in planning for the consolidated application, it encompasses a great deal more.

As the first phase in a multi-year plan to enhance planning capability statewide, regionally, and locally, staff from the Agency and the regional education service centers are serving on teams to assist at least one pilot school in each of the 20 regional centers to move toward comprehensive planning. The 35 school districts participating in the project represent a cross section of the schools in the State—large and small, urban and rural.

A major aim of the project is that staff members from the Agency and the service centers broaden their vision and upgrade their competence to assist schools in educational planning.

With experience gained during this first year, the Agency and the service centers should be in position in 1969-70 to extend the planning assistance to a larger group of schools within the State. By fiscal 1971, it is anticipated that through the efforts of the Agency, regional centers, and local school districts in the pilot phases of the project, planning assistance will be within reach of all schools in the State.

The sole purpose of comprehensive, long-range state level planning is to bring about better decisions in the local school district, to develop better educational planning locally.

I have reviewed briefly four major efforts directed toward improving educational planning:

- The establishment of internal planning machinery within the Texas Education Agency
- The establishment of the Education Service Centers
- The development of the consolidated application for Federal assistance
- The pilot project in educational planning

These four kinds of thrusts, I think, show the relationship of planning in state department of education to results in local school districts.

COMPREHENSIVE STATE-WIDE PLANNING
NORTH DAKOTA MODEL

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Dr. Kent G. Alm is presently Vice-President for Academic Affairs at Mankato State College and Professor of Educational Administration. Dr. Alm received his Ph.D. from University of North Dakota and was then associate dean of the College of Education at the University of North Dakota until 1967. He developed and directed the Comprehensive State-Wide Study of Education in North Dakota and is the author of the Alm Report. He has worked extensively with State Departments of Education and has served as a consultant to the U.S. Office of Education, the U.S. Department of State, as well as to many Latin American institutions.

The State-Wide Study of Education in North Dakota which was carried out in 1965-67 was a combined effort of the North Dakota State Legislature, the State Department of Public Instruction, and the University of North Dakota. It was initiated by legislative mandate with an appropriation from the 1965 Legislature of $20,000 to carry out a state-wide study of education. This appropriation was contingent upon the availability of matching funds from other sources. The State Department of Public Instruction agreed to submit a proposal to Title V, ESEA, for the additional support of such a study. This proposal was approved in the amount of $70,000. Thus, the total cost of the study was $90,000 spread over an 18-month period.

The Study concerned itself with all aspects of public elementary and secondary education as well as selected aspects of the teacher education programs in the State's colleges and universities.

The major elements of the Study are listed below along with the major findings concerning that element:

1. *School Population*—The demographers of the University of North Dakota were commissioned to project the school-age population by age and grade level for the period 1967 through 1980. The results of their projection predicted a modest decline in school-age population statewide for the first ten years of the period which would then be followed by a rather modest increase bringing the school-age population anticipated in 1980 to approximately the 1966 level, specifically 147,000 students.

This was a particularly important projection, because had North Dakota anticipated a burgeoning school population, the recommendations of the State-Wide Study would have been markedly different.

2. *School District Organization*—The State's approximately 150,000 students were enrolled in 529 relatively autonomous local school districts. Districts varied, in size of enrollment and in local abilities to support public school programs.

In 1965-66:

- 74 districts operated no school program at all
- 168 districts only provided one-room elementary schools
- 81 additional districts only provided grades one through eight
- These 323 districts (74 non-operating, 168 rural one-room, plus 81 offering grades one through eight) transported their youngsters of high school age to twelve-grade districts elsewhere

- 9,096 youngsters were enrolled in 67 non-accredited twelve-grade districts
- The vast majority of the State's pupils were enrolled in 211 state-accredited twelve-grade districts
- The typical twelve-grade district enrolled fewer than 300 students
- The average high school in North Dakota in that year enrolled 90 youngsters in grades nine through twelve, offered 26 units of credit, and employed five teachers

Inasmuch as the State was not one of the eleven states in the nation which had a state-wide map of the school districts, one had to be constructed. The first multi-colored map of school districts ever designed for North Dakota was printed.

3. *School Personnel*

Elementary teachers

- North Dakota ranks 50th among the states in the matter of the professional preparation of its elementary teachers. 60% of the elementary teachers in the State in 1965-66 did not have college degrees.

Secondary teachers

- North Dakota also ranked 50th in the preparation of its high school teachers. Only 13% of the high school teachers in North Dakota had master's degrees.

Educational service personnel

- There was one qualified librarian for every 12,000 youngsters in North Dakota. 284 full-time librarians were needed.

High school counselors

- There was one high school counselor for every 808 youngsters in North Dakota. Approximately 100 additional full-time counselors will be required by 1975.

Teachers for the educationally handicapped

- These are virtually nonexistent in North Dakota. Elementary pupils with physical, mental, or emotional handicaps will require 199 special education teachers by 1975; an additional 85 teachers will be needed at the high school level for this purpose.

Elementary administrators and supervisors

- These personnel were generally part-time on the job—spending the remainder of their time as a teacher or coach. Only 68 of the State's 261 principals qualify for state certification. 259 qualified full-time elementary administrators and supervisors will be needed by 1975.

Secondary administrators and supervisors

- This group is even less well prepared than those in the elementary school. There were only 38 fully qualified high school principals in the State. An additional 200 persons hold part-time positions as high school administrators but are not qualified to do so. By 1975, the State must prepare and employ no fewer than 109 full-time qualified secondary school administrators.

School superintendents

- Of the 289 persons now employed as full or part-time district superintendents, 67.8% hold the master's degree and thereby meet minimum certification requirements. By 1975, the State needs to upgrade the preparation of most of its superintendents and to prepare and employ no fewer than 40 additional new administrators with even higher levels of professional preparation.

4. *School Finance*

Level of expenditure

- In 1965-66, North Dakota expended approximately $544 per pupil for public education.

- Of that total, $427 was expended for instructional and related operating costs (exclusive of transportation, capital expansion, and bonded indebtedness).
- About $41 per pupil was expended for transportation services (not all pupils are transported—this cost represents about $106 per transported pupil).
- Approximately $76 per pupil was expended to pay principal and interest on bonds, and for other direct costs of capital expansion (land, buildings, and equipment).
- At this level of expenditure, the State was able to support an average teacher's salary of about $5,100, nearly $1,500 below that of the national average in that year.

Sources of funding

- Local school district provided the largest share of funds available for education.
- Local district property valuation was about 688.3 millions for tax purposes. The average local tax levy in the State was 57.5 mills and produced approximately 39.6 million in local revenue.
- State and county taxes and other state revenue sources added approximately 34.5 million.
- The Federal Government provided 5.67 million.
- The total expenditure for the year ending June 30, 1966, was approximately 79.8 million, exclusive of the expenditure for funds borrowed for the construction of facilities, etc.
- Local support represented about 50% of total current expenditure in that year; state, county, and federal funds provided the balance, with federal supports slightly in excess of 7%.

5. *School Programs*

Elementary schools

- North Dakota ranks 50th among the states in overall opportunities for elementary education. Only 2,800 students were enrolled in kindergarten in that year. At least 12,500 more should be added.
- Moreover, the quality of opportunities for elementary pupils in grades one through eight is limited. Nearly 23,000 elementary children are instructed solely by non-degree teachers.
- At least one full-time elementary teacher in five must teach at two or more grade levels, as a result, these teachers face the extremely difficult task of teaching six or seven different subjects at each of two or more levels of instruction.
- All teaching in one-room rural schools occurs in combination classes.
- The number of undesirable combination classes should and can be substantially reduced in North Dakota.

Secondary schools

- Students in most high schools receive instruction in English, social studies (history, civics), and some aspects of business. Most also receive courses in mathematics and science, although the number and diversity of these offerings are limited. Few schools provide adequate opportunity for study of foreign language, vocational-technical areas, or advanced work in any major field of study except English.
- 117 of the State's 278 twelve-grade districts offer fewer than 26 units of high school credit per year.
- In small districts, certificated high school teachers typically find it necessary to teach some courses for which they are either unqualified or minimally prepared. 2,465 persons were employed in 1966 as high school teachers; 1,300, or more than half, were assigned to teach courses in two or more fields of specialization. Only 47.2% taught solely or principally in their major field

of competency; the desired practice. 7% of the teachers were assigned to teach in as many as four different fields of major; a task that is beyond the capabilities of all but the most accomplished scholar. Additionally, 12% were assigned to teach in three different fields of major. Such combination teaching affected 18,000 high school students (44.4% of the total) in 1966.

Instructional materials

- The typical elementary teacher in 1965-66 had $54.00 to spend for library and audio-visual materials for her classroom. High school teachers, where courses are more diversified and expensive to operate, had $120. These amounts are barely adequate to replace antiquated or wornout volumes and materials.
- By 1975, the number and variety of instructional supplies, aids and materials must be substantially increased. An expenditure level of $25 per pupil should be considered as a minimum target.

Achievement

- Contrary to popular conviction, students in the State's small school districts do not—on the average—perform as well as students in large high school districts on standard tests of academic achievement.

As a result of these and other findings in the study, an overall plan for educational development in North Dakota was prepared and designed specifically to achieve the following objectives:

1. To consolidate and focus the energies of the State's public colleges and universities in a dramatic new program of personnel development, research and service, thereby to make the classroom teacher a vital part of a continuing research and improvement effort.
2. To prepare and place 1,950 fully qualified and specifically prepared teachers into the State's elementary schools, thereby to improve the quality of education for elementary school children who otherwise would be taught by under-prepared teachers (as 23,000 students now are taught).
3. To place each of North Dakota's 144,000 school children in a reasonably organized and administratively effective school district; each such district to contain at least 12 grades of instruction, and its high school to enroll not fewer than 215 pupils in the upper four grades.
4. To enlarge the scope, focus, and effectiveness of educational services offered by the State Department of Public Instruction, through seven regional service centers; each such center to be designed to energize and facilitate local district study, planning, evaluation, reorganization, and program improvement.
5. To upgrade the level of financial support for the normal and ordinary recurring costs of public education; this requires an improved State Foundation Program that (a) reduces inequities among local school districts and (b) enables school districts to use local tax funds more freely for program improvements over and beyond the State-guaranteed minimum (for example, for public kindergartens).
6. To shift to State Government the responsibility for the extraordinary costs of educational services: the extraordinary costs now are divided inequitably among local districts for such items as school construction, debt service, transportation, and special services for rural isolated pupils.
7. To employ State funds to reward those local school districts that take the initiative to improve the quality and efficiency of their operations; an appropriate reward would make State aid directly proportionate to the number of qualified teachers that a district employs.

A new Minimum Foundation Program is needed to achieve these objectives in the State. The purpose of this document is to describe the elements of a desired new Foundation Program, and to suggest means whereby it might be introduced into the State at an early date.

A new Foundation Program alone, however, will not solve the State's basic education problems. The proposed Foundation Program's effectiveness depends largely upon two companion efforts. These are:

1. Systematic reorganization of the State's 604 local school districts. It is suggested that needed reorganization occur in two steps; first, by 1968-70, enroll every pupil in a twelve-grade district; second, by 1971-72, enroll every pupil in a twelve-grade district whose high school enrolls no fewer than 215 pupils in the upper four grades. The latter describes a Type I accredited district—as defined in current regulations and standards of the Department of Public Instruction—and represents the minimum size of administrative unit that can be justified in North Dakota.

2. Systematic production and placement of fully prepared educational personnel in local school districts, so that by 1975 every pupil in the State may be taught by a qualified teacher, and each school may be staffed by fully qualified administrators, counselors, librarians, and related educational service personnel.

Central to the proposed new Foundation Program is the idea that the State—by careful re-utilization of existing funds—can guide the future development of the schools in ways that will guarantee by 1975 an adequate and equal educational opportunity for each pupil. The Program is sufficiently flexible to allow for changes that might occur in the State's economy. It is designed also to enable the State to determine and achieve an optimum use of educational resources in any given year, at whatever level of financial support may be available in that year.

The New Foundation Program

- The New Foundation Program is designed to insure that each pupil enrolled in the public schools will have access to a program of educational services which meets at least minimum standards of adequacy.
- Specifically, the Foundation Program guarantees each Type I, twelve-grade district the financial resources needed to provide the following levels of services:
  - A qualified teacher in every classroom, at an average ratio of 25 pupils per full-time teacher.
  - Without excessive local effort, the district thereby will be enabled to maintain an average pupil-teacher ratio of 1:22 in grades 9-12, and 1:27 in grades 1-8.
  - A qualified administrator for each 12 qualified full-time teachers.
  - A qualified instructional supervisor for each 24 qualified full-time teachers.
  - A qualified librarian for each 500 enrolled pupils.
  - Research, planning, and evaluation services, equivalent.
  - A secretary (or other para-professional) for each 6 qualified full-time teachers.
  - Special education services for an estimated 5% of enrollment, in an amount equivalent to one and one-half times the cost per pupil for regular instructional services.
  - Research, planning, and evaluation services, equivalent to approximately 1% of current annual expenditure.
  - Professional in-service education programs equivalent to $5 per pupil per year.
  - Health, recreational, and relevant community services, equivalent to $5 per pupil per year.

- Plant maintenance and operation, equivalent to 12% of annual current expenditure.
- Fixed charges, including teacher retirement and/or social security, equivalent to 8% of personnel salaries.
- Capital expenditures for minor, recurring items (exclusive of bonded indebtedness), equivalent to 4% of current expenditure.

Dr. Vito Perrone, Dean of the New School at the University of North Dakota, has already described for you that program. It is certainly one of the most unique if not the most unique program in teacher education in the United States. It was a part of the recommendations of the State-Wide Study of Education.

The status of the recommendations is as follows: The 1969 session of the North Dakota Legislative Assembly will consider all of the recommendations and commit to law that which it feels appropriate. Preliminary indications suggest that substantial parts of the State-Wide Study's recommendations will be adopted.